

GRATUITOUS VIOLENCE AND EXPLOITIVE SEX: WHAT ARE THE LESSONS?
(Including Violence Profile No. 13)

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I appear in the capacity of an individual researcher and not as a representative of our School, University, or any organization. The research I am reporting comes from our ongoing project called Cultural Indicators designed to investigate the nature of television programming and its relationships to viewer conceptions of social reality.

We have conducted the longest-running and still only comprehensive and cumulative research on what it means to grow up and live with television. The project originated in 1967. It has been supported by funds from the President's Commission on the Causes and Prevention of Violence, the Surgeon General's Scientific Advisory Committee on Television and Social Behavior, the National Institute of Mental Health, the White House Office of Telecommunications Policy, The American Medical Association, the Administration on Aging, and the National Science Foundation. It is a team effort conducted by my colleagues Drs. Larry Gross, Michael Morgan, Nancy Signorielli and myself.

In this report I will highlight our Violence Profile No. 13, summarize our research on viewer conceptions of relevant aspects of reality, and discuss findings related to sexual portrayals and conceptions. Detailed tabulations, figures, and bibliographies can be found at the end of the report.

Violence Profile No. 13

Our measures of violence are based on the reliable observation of clear-cut and unambiguous episodes of physical violence (in any context) on network dramatic programs aired in prime time and during weekend daytime (children's) program hours. These measures include the prevalence of violence in the programs, the rate of violence per program and per hour, and the involvement of major characters in various types of violence as violentists or victims (or both). The measures are combined into composite indicators of violence and a Violence Index to facilitate comparisons over time and across programming hours and networks. The Violence Index meets the statistical and empirical requirements of an Index. The separate measures and indicators that compose the Index are also included in the tabulations attached to the report so that they may be examined separately. The findings since 1967 are reported in Appendix Tables 1-15 and illustrated on Figures 1-4. These results include new data for the 1982-83 and 1983-84 seasons, and comprise Violence Profile No. 13.

The overall Violence Index for the last two seasons remained close to the average of our monitoring results since 1967. However, while

prime time violence fell slightly below the 17-year average, weekend daytime (children's programs) violence rose far above it, including a record high in 1982-83. The three major networks tended to converge; differences for the last two seasons are negligible.

The relatively lower level of violence during the prime time "family hour" that persisted during the '70s vanished in the '80s. In fact, the "family hour" when most children are in the audience, became more violent. For example, the rate of violent incidents on programs aired 8-9 p.m. was 5.4 and 6.0 for the last two seasons, respectively, while comparable figures for 9-11 p.m. were 4.1 and 4.2 (See Tables 1-3 and Figures 1-4).

Violence in children's weekend programs reached a record high in 1982-83 and remained above the 17-year level in 1983-84. The rate during the first period was 30.3 violent incidents per hour. The rate for the second period was 25.5 per hour. The 17-year average is 20 violent incidents per hour.

The saturation of children's programs with violence (consistently 5 to 7 times higher than in prime time) comes at a time when the regulatory mechanisms of public participation and public interest are being dismantled and funding for public television -- the remaining source of quality programming for children -- is severely cut.

Television certainly did not invent violence; it just put it on the assembly line. Only television reaches virtually all homes with the same pattern of images and messages. Unlike other media,

television is used relatively non-selectively. It is a ritual, a common symbolic environment into which children are born and whose inescapable messages help shape and maintain common conceptions of life, society, and the world.

Video mayhem pervades the typical American home in which the television set is on an average of 7 hours a day. Cable seems only to increase the penetration of its patterns into everyday life (Morgan and Rothschild, 1983). For the past 17 years, at least, our children grew up and we all lived with a steady diet of about 16 entertaining acts of violence (2 of them lethal) in prime time alone every night, and probably dozens if not hundreds more for our children every weekend. We have been immersed in a tide of violent representations that is historically unprecedented and shows no real sign of receding.

What are the lessons?

The Social Role of Violence

Even more significant than the sheer amount of televised violence is its role on television and in the lives of viewers. Defining that role as only or primarily related to inciting aggression and potential threats to law and order has been the great media game that tended to make most violence studies, reports, and hearings the social and political dead ends they have been. We have concentrated our studies of the past few years on exploring all the potential lessons that might be related to exposure to violence-laden television and have come to conclusions very different from the conventional concerns.

Our research suggests lessons more far-reaching than the instigation of occasional acts of violence, no matter how disruptive and tragic they might be. We have concluded that violence is one means of distributing power in the symbolic (and real) world. While the convergence of research on the subject indicates that exposure to violence does occasionally incite and often desensitize, our findings indicate that for most viewers television's mean and violent world tends to demonstrate and cultivate a pattern of inequality and domination.

Humans threaten to hurt or kill, and actually do so, mostly to scare, terrorize, and impose their will upon others. Symbolic violence carries the same message. It is a show of force and demonstration of power. It is the quickest and most dramatic demonstration of who can get away with what against whom.

Violence as a scenario of social relationships reflects the structure of power in society and tends to cultivate acceptance of that structure. If we take a particular social group and divide the number of those who fall victim of violence by the number who victimize others, we can obtain a relative indicator of risk and vulnerability for that group. For example, for every 10 American men characters who commit violence on television, 11 American men and 12 foreign men fall victim to it. But for every 10 American women whose roles call for inflicting violence on others, 13 American women and 23 foreign women suffer violence. A fuller indication of the reverse pecking order of the world of prime time drama (the groups whose ratio of victimization

to violence is lightest on television) can be seen in the following list:

For every 10 violent acts in each of these groups, the number of victims in the same group is:

Foreign women	23
Nonwhite women	22
Older women	19
Girls	19
Young women	18
White women	16
Older men	15
Boys	14

It is clear that women, young and old people, and some minorities rank as the most vulnerable to victimization on television. We have also found that symbolic victimization on television and real world fear among women and minorities, even if contrary to the facts, are highly related (Morgan, 1983).

Heavy viewers are most likely to express the feeling of living in that self-reinforcing cycle of the "mean world." Our analysis of large scale surveys (reported in detail in the articles cited in the bibliography) indicates how the cycle works. Responses to questions about chances of encountering violence, safety of neighborhoods, fear of crime, etc., have been combined into an Index of Images of Violence. Table 16 and Figure 5 show that most heavy viewers in every education, age, income, sex, newspaper reading and neighborhood category express

a greater sense of insecurity and apprehension than do light viewers in the same groups. (Previous results also show that heavy viewers are more likely to acquire new locks, watchdogs and guns "for protection.")

The data show sizable group differences, reflecting inequalities of risk and power. Even though most heavy viewers feel more at risk than light viewers, the most vulnerable to the "mean world" syndrome are women, older people, those with lower education and income, those who do not read newspapers regularly, and those who live in large cities.

However, on some questions some groups respond differently. Television viewing may blur some distinctions and bring groups closer together into what we call the television "mainstream." Viewing may also leave some groups relatively unaffected while making others extremely responsive to the television image.

Figure 6 shows the "mainstreaming" implications of viewing. Those who live in suburbs and non-metropolitan areas are so convinced that "crime is rising" that television adds little or nothing to that perception. But those who live in cities (small and large) express an equally near-unanimous belief in the rising crime rate only if they are heavy viewers.

Similarly, high and medium income (but not low income) respondents over-estimate their chances of becoming involved in violence if they are heavy viewers. The more affluent heavy viewers share the violent "mainstream" with lower income respondents.

These group differences illustrate the complex interplay of demographic and real world factors and television viewing. On the whole, the most general and prevalent association with television viewing is a heightened sense of living in a "mean world" of violence and danger.

I believe that an unequal and corrosive sense of insecurity and mistrust invites not only aggression but also exploitation and repression. Fearful people are more dependent, more easily manipulated and controlled, more susceptible to deceptively simple, strong, tough measures and hard-line postures --- both political and religious. They may accept and even welcome repression if it promises to relieve their insecurities. That is the deeper problem of violence-laden television.

Exploitive Sex

It should come as no surprise, at this point, that sex, as much as violence, is an expression of a social relationship. Although they are opposites in that violence is conflict while sex is (or should be) cooperative, they are similar in their demonstration of either inequality or the struggle toward equity and mutuality.

Our own monitoring and studies by others (see "Journal of Communication Articles on Sex in Violence" in the bibliography) show that more explicit and more permissive sexual references (and occasional portrayals) have increased since the mid 70's. However, while television may have become more sexy, it has not become

significantly less sexist. The combination of the two trends makes for exploitive sex as a nightly staple of prime time entertainment.

Most nudity and other forms of explicit vulnerability depicted on television is female; most assertion of power is male. Although the proportion of female leads has increased, men still outnumber women 3 to 1 in prime time television drama, and most women are still cast in more restricted and dependent roles than in real life.

The lessons? We have constructed a "Sexism Index" from responses to National Opinion Research Center General Social Surveys that indicate a sexist orientation. These express beliefs that women are not suited to politics, should not work outside the home if their husbands can support them, and should take care of running their home but leave running the country to men. Those who subscribed to all these propositions were grouped into demographically matched low, medium, and high television viewing groups. The results are given in Table 17 and Figure 7.

The more television viewers watch the more sexist their orientation. In the typical "mainstreaming" fashion, the least sexist groups (young people and those who call themselves liberals) exhibit the greatest differences between heavy and light viewers. Furthermore, while most viewers become more sexist, one group of low-income viewers, the most traditional and sexist as light viewers, approach the television mainstream from the opposite direction: the heavy viewers among them are less sexist than their light viewing counterparts. So while self-styled liberals and moderates join the more sexist

television mainstream, for the most traditional and bigoted viewers television seems to be a relatively "liberalizing" experience.

The Politics of Exploitive Violence and Sex

The television experience blurs many traditional distinctions, cultivates a relatively insecure and anxious attitude toward others and the world, and tends to maintain or even enhance feelings of inequality of place and power. The mechanisms of representation and cultivation are resistant to substantial and lasting change (and tend to cultivate similar resistance to change) because they work well for the institutions producing it and because television is relatively insulated from public participation by either the ballot box or the box office.

The dramatic ingredients of mechanical violence and exploitive sex are produced on the cultural assembly line for great corporations. The conventional construction of the issue is both ironic and deceptive. It asks only if media violence and sex are the CAUSE of aggression or immorality. Of course, while complex behavior is not "caused" by a simple exposure, frequent and massive doses to media violence and brutal pornography can desensitize and incite. But that is only the tip of an iceberg of different complexion.

Exploitive symbolic violence and sex may not be threats to the social order as much as mechanisms of existing inequalities and of social control. The research shows both incitation of the few and integration of the many into the prevailing hierarchy of powers. That

explains why conservative industries keep producing it despite protests and pressures, and why any attempt to explore existing economic constraints and to channel the flow into a freer and more humane direction meets furious political resistance.

About eight years ago, the networks successfully defeated the efforts of legislators, citizens, and public organization to look into the structural causes of their manufacturing of violence as a cheap but effective industrial ingredient of mass-cultural production. The full story of that counterattack has never been told.

Briefly, congressional investigations in the late 50's and early 60's resulted in the first round of network promises, but no action. The National Commission of the Causes and Prevention of Violence in the late 60's, which sponsored the first of our violence profiles, came to the same conclusion as investigations before and since, and with the then existing evidence behind it. The Surgeon General's Scientific Advisory Committee launched the most ambitious program of media studies ever undertaken, and confirmed the same verdict, providing ample scientific support for a broad movement of citizens' organizations. That movement led to a series of congressional hearings, first in the Senate under the leadership of John Pastore, and then in the House under the guidance first of Torbert Macdonald and then Lionel Van Deerlin. Finally, in 1977, after many years of investigations and hearings, all pointing in the same direction, the House subcommittee on communications drafted a report which instructed its staff "to explore fully the structure of the broadcasting industry in order to enable the Subcommittee to better evaluate (a) whether the present system of

commercial network broadcasting which dominates viewing habits arbitrarily restricts program choice or is in any way primarily responsible for the high levels of violence on television, and (b) whether consideration should be given to altering the structure of the broadcast industry by legislation designed to increase competition and, perhaps, choice."

Needless to say, when that draft was leaked all hell broke loose. Members of the subcommittee told me that they had never before been subjected to such relentless lobbying and pressure. Major campaign contributors were also contacted. The report was delayed for months. The Subcommittee staffer who wrote the draft was forced out -- fired. The day before the final vote was to be taken, a new version drafted by broadcast lobbyists was substituted. It ignored the evidence of the hearings and gutted the report, shifting the burden from network structure to the families of America. When the network-dictated draft came to a vote, members of the parent committee who had never attended hearings were mobilized, and the watered down version passed by one vote.

The movement to reduce violence and sexism on the airways has not yet recovered from the defeat, and both continue at a high level. The conventional definition of the problem insulates sex and violence from their full symbolic and social functions and narrows the issues to an easily refutable single-cause model. By focusing on the tip of the iceberg rather than its base, on the symptoms rather than the underlying social pathology, this framing of the issue invites its own

refutation. It also adds to public paranoia and strengthens powerful repressive mechanisms expressed every day throughout our culture.

Commercialized violence and exploitive sex are but the most overt manifestations of a pattern of inequities and exploitations of the weaker and more vulnerable groups of our population. The pattern is endemic in the structure of our institutions and is not easily changed -- nor impermeable. Focusing on the most overt manifestations alone may simply channel energies into more repression and harassment and distracts attention from the larger symbolic world in which men have most of the values and power, in which both young and old suffer from symbolic deprivation or annihilation; in which women and minorities have less than their share of values and dignity but more than their share of risk, ridicule, and victimization.

We need an effective mobilization of parents, educators, religious and political leaders, and other citizens for liberation, not just to combat symbolic violence and exploitive sex as such but the larger structure of inequity and injustice behind it. We need an environmental movement to address a pervasive discharge into the mainstream of the common environment most vital to our humanity -- the environment of symbols -- that constrains and hurts too many of us.

Censorship is not the issue as the market for television production is not free in any sense of the word. A handful of production companies create the bulk of the programs and sell them to broadcasters, not to viewers. The cheapest and least offensive programming is the most profitable.

The system operates on a lucrative but restrictive basis of advertising moneys. The law that makes these advertising expenditures a tax-deductable business expense is the foundation of the television industry. The cost of advertising is included in the price of the products we buy. Unlike other business costs, but like taxation (without representation, to be sure), the cost must be paid by all whether or not they use the service. According to a report compiled by Broadcasting magazine (August 10, 1981, pp. 50-52), the television levy per household in 1980 ranged from about \$90 in Atlanta to \$29 in Wilkes-Barre--Scranton, Pa. In my city of Philadelphia it was \$39.39. That is what the average Philadelphia household paid for television, included in the price of products they bought, whether or not they watched. You pay when you wash, not when you watch....

The only way to reduce exploitive television content and, more importantly, the price we pay for its saturation of the life space of most Americans, is to allocate these and perhaps even addition resources to that end. In other words, it is to extend the legal and economic support for a broader view of the social and cultural mission of television. Such a move would not infringe on First Amendment rights. On the contrary, it would extend the First Amendment's prohibition of abridgement of the cultural marketplace to also cover corporate restrictions of control, purpose, and function.

Clearly, such institutional adjustments will take time and study, as well as determined effort. Those who would want to move television toward a more open system should know what they are up against.

Nevertheless, the effort is in the long-run interest of the industry as well as of our society. The rigid imperatives of television production will have to give way to a freer marketplace of ideas, problems, conflicts, and their resolutions. Freedom, time, and talent are needed to create a greater diversity of human scenarios and thus reduce exploitive violence and sex to legitimate and equitable dramatic functions. The resource base for television will have to be broadened to liberate the institution from total dependence on advertising monies, purposes, and ratings.

The Study Committee should recommend a mechanism that will finance a freer commercial system, one that can afford to present a fairer, more peaceful, and more democratic world of television. That is the only legitimate and effective way to reduce, if not eliminate, exploitive sex and violence. The mechanism should also help protect creative TV professionals from both governmental and corporate dictation. Only then will they be free to produce the diversified and entertaining fare they know how to create but cannot under existing constraints and controls.

REFERENCES

- Bonfadelli, Heinz. "Der Einfluss des Fernsehens auf die Konstruktion der Sozialen Realität: Befunde aus der Schweiz zur Kultivierungshypothese." Rundfunk und Fernsehen, 1983/3 - 4, 31, 415-430.
- Bryant, Jennings, Rodney A. Carveth, and Dan Brown. "Television's Influence on Social Reality." Journal of Communication, 1981, 31:1, 106-119.
- Gerbner, George. "Dimensions of Violence in Television Drama," in R. M. Baker and S. J. Ball (eds.), Violence in the Media. Staff Report to the National Commission on the Causes and Prevention of Violence. Washington: Government Printing Office, 1969(b), 311-340.
- Gerbner, George and Larry Gross. "Living with Television: The Violence Profile." Journal of Communication, 1976, 26:2, 172-199.
- Gerbner, George, Larry Gross, Marilyn Jackson-Beeck, Suzanne Jeffries-Fox, and Nancy Signorielli. "Cultural Indicators: Violence Profile No. 9." Journal of Communication, 1978, 28:3, 176-207.
- Gerbner, George, Larry Gross, Nancy Signorielli, Michael Morgan, and Marilyn Jackson-Beeck. "The Demonstration of Power: Violence Profile No. 10." Journal of Communication, 1979, 29:3, 177-196.
- Gerbner, George, Larry Gross, Michael Morgan, and Nancy Signorielli. "The 'Mainstreaming' of America: Violence Profile No. 11." Journal of Communication, 1980(b), 30:3, 10-29.
- Gerbner, George, Larry Gross, Michael Morgan, and Nancy Signorielli. "Charting the Mainstream: Television's Contributions to Political Orientations." Journal of Communication, Spring 1982(b), 32:2, 100-127.
- Gross, Larry. "The Cultivation of Intolerance: Television, Blacks and Gays," in O. Melischek, et al., (eds.) Cultural Indicators: An International Symposium. Vienna: Austrian Academy of Sciences, 1984.

- Hawkins, Robert P. and Suzanne Pingree. "Television's Influence on Social Reality." In D. Pearl, L. Southilet, and J. Lazar (eds.) Television and Behavior: Ten Years of Scientific Progress and Implications for the 80's, Vol. 2: Technical Reviews, 1982.
- Morgan, Michael. "Television and Adolescents' Sex-Role Stereotypes: A Longitudinal Study." Journal of Personality and Social Psychology, 1982, 43:3, 947-955.
- Morgan, Michael. "Symbolic Victimization and Real-World Fear." Human Communication Research, 1983, 9:2, 146-157.
- Morgan, Michael and Nancy Rothschild. "Impact of the New Television Technology: Cable TV, Peers, and Sex-Role Cultivation in the Electronic Environment." Youth and Society, September 1983, 15:1, 33-50.
- Pingree, Suzanne and Robert Hawkins. "U. S. Programs on Australian Television: The Cultivation Effect." Journal of Communication, 1980, 31:1, 97-105.
- Weimann, Gabriel. "Images of Life in America: The Impact of American T.V. in Israel." International Journal of Intercultural Relations, 1984, 8, 185-197.
- Williams, Tannis MacBeth, Merle L. Zabrack and Lesley A. Joy. "The Portrayal of Aggression on North American Television." Journal of Applied Social Psychology, 1983.

Table 1: All Programs, All Networks

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	183	232	203	291	226	110	121	111	126	130	134	121	117	2105
Program hours analyzed	120.5	138.9	142.3	225.7	153.0	71.6	79.0	77.3	77.2	74.2	71.2	70.1	72.5	1374.1
Leading characters analyzed	455	573	552	987	664	290	355	298	381	394	402	367	337	6055
PREVALENCE	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Programs with violence (XP)	81.4	80.6	79.8	78.0	77.4	89.1	76.9	84.7	81.0	85.4	85.8	76.0	82.1	80.9
Program hours with violence	85.1	80.8	85.7	82.8	81.8	89.5	78.3	85.6	78.0	84.6	89.2	77.6	83.4	83.2
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	872	1128	1022	1562	1185	680	629	643	628	743	761	584	630	11,067
Rate per program (R/P)	4.8	4.9	5.0	5.4	5.2	6.2	5.2	5.8	5.0	5.2	5.7	4.8	5.4	5.3
Rate per hour (R/H)	7.2	8.1	7.2	6.9	7.7	9.5	8.0	8.3	8.1	10.0	10.7	8.3	8.7	8.1
Duration-violent acts (hrs)	--	--	--	10.8	6.8	4.4	3.4	2.8	3.6	3.7	3.8	3.3	4.2	46.8
ROLES (% LEADING CHARACTERS)	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Violents (hurt others)	52.7	49.7	42.4	40.1	43.8	60.7	48.2	42.3	49.3	48.7	50.0	51.5	44.5	46.9
Victims (are hurt)	60.4	58.1	50.2	53.0	54.1	64.8	52.4	57.4	52.5	56.3	54.2	55.3	56.7	55.3
Involved in violence (XV)	69.5	65.1	59.8	61.4	64.2	74.8	63.4	64.8	62.7	67.0	65.7	62.9	64.7	64.4
Killers	11.6	4.7	8.2	8.5	6.5	6.6	5.1	3.0	3.1	2.8	2.5	3.5	5.0	6.0
Killed	5.5	3.0	4.0	4.7	3.8	3.1	1.1	2.0	1.3	1.5	1.2	1.9	9	3.0
Involved in killing (XA)	15.4	6.6	9.8	10.9	9.2	8.3	5.4	5.0	3.9	3.3	3.0	4.6	5.6	7.7
Violent : Victim Ratio	-1.15	-1.17	-1.18	-1.32	-1.23	-1.07	-1.08	-1.36	-1.06	-1.16	-1.08	-1.07	-1.27	-1.18
Miller : Killed Ratio	+2.12	+1.59	+2.05	+1.83	+1.72	+2.11	+4.50	+1.50	+2.40	+1.83	+2.00	+1.56	+5.67	+2.01
INDICATORS OF VIOLENCE														
Program Score:	105.4	106.6	104.2	102.6	103.4	120.5	103.3	112.9	107.2	116.8	118.6	102.2	110.3	107.6
PS = (XP) + 2(R/P) + 2(R/H)														
Character V-Score:	84.8	71.7	69.6	72.3	73.3	83.1	68.8	69.8	66.7	70.3	68.7	67.5	70.3	72.1
CS = (XV) + (XA)														
Violence Index:	190.3	178.3	173.8	174.9	176.8	203.6	172.1	182.7	173.9	187.1	187.3	169.7	180.6	179.7
VI = PS + CS														

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 2: Prime-Time Programs

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	121	125	122	177	134	61	68	63	64	64	65	77	63	1204
Program hours analyzed	106.0	111.8	111.8	174.5	120.1	56.5	62.4	63.0	60.7	59.2	57.8	60.6	58.8	1103
Leading characters analyzed	340	350	386	609	431	172	210	191	218	229	216	247	195	3794
PREVALENCE	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Programs with violence (XP)	75.2	66.4	73.8	67.8	68.7	80.3	66.2	74.6	70.3	73.4	80.0	63.6	73.0	71.1
Program hours with violence	84.0	77.0	84.4	79.8	80.0	86.7	75.2	82.5	75.3	81.4	88.7	74.2	81.3	80.7
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	549	434	533	919	716	342	371	285	344	336	343	278	280	5730
Rate per program (R/P)	4.5	3.5	4.4	5.2	5.3	5.6	5.5	4.5	5.4	5.2	5.3	3.6	4.4	4.8
Rate per hour (R/H)	5.2	3.9	4.8	5.3	6.0	6.1	5.8	4.5	5.7	5.7	5.9	4.6	4.8	5.2
Duration-violent acts (hrs)	--	--	--	8.0	4.8	3.2	2.3	1.5	2.6	2.5	2.4	2.3	2.8	32.5
ROLES (% LEADING CHARACTERS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Violents (hurt others)	47.6	36.6	39.1	40.7	40.1	56.4	43.8	33.5	45.0	38.5	39.4	39.3	37.4	41.0
Victims (are hurt)	53.8	42.9	43.5	46.3	45.5	54.7	42.9	44.5	46.3	40.2	39.3	40.9	43.0	45.1
Involved in violence (XV)	64.4	49.4	53.9	53.7	55.0	67.4	53.8	52.9	53.7	50.7	50.0	48.2	53.3	54.2
Killers	14.1	6.9	11.4	13.3	10.0	9.9	8.6	4.7	5.5	4.4	4.6	4.9	8.7	9.1
Killed	5.6	4.0	5.2	7.2	5.3	4.7	1.9	3.1	2.3	2.2	2.3	2.8	1.5	4.3
Involved in killing (XK)	17.4	9.4	13.5	16.9	13.7	12.2	9.0	7.9	6.9	4.8	5.8	6.5	9.7	11.4
Violent : Victim Ratio	-1.13	-1.17	-1.11	-1.14	-1.13	+1.03	+1.02	-1.33	-1.03	-1.05	1.00	-1.04	-1.15	-1.10
Killer : Killed Ratio	+2.53	+1.71	+2.20	+1.84	+1.87	+2.13	+4.51	+1.50	+2.40	+2.00	+2.00	+1.71	+5.67	+2.12
INDICATORS OF VIOLENCE														
Program Score: PS = (XP) + 2(R/P) + 2(R/H)	94.6	81.1	92.0	88.7	91.3	103.6	88.8	92.7	92.4	95.2	102.4	80.0	91.4	91.1
Character V-Score: CS = (XV) + (XK)	81.8	58.9	67.4	70.6	68.7	79.7	62.8	60.7	60.6	55.5	55.6	54.7	63.0	65.6
Violence Index: VI = PS + CS	176.4	140.0	159.4	159.3	159.9	183.3	151.6	153.4	153.0	150.7	158.0	134.7	154.4	156.7

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 3: Programs Aired 8-9 P.M. EST

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	74	73	55	86	61	25	32	27	31	29	26	35	25	579
Program hours analyzed	57.0	53.3	48.5	79.0	40.3	20.0	26.0	20.5	27.7	24.7	18.0	21.4	19.0	455.3
Leading characters analyzed	205	206	176	292	184	69	87	79	96	105	76	96	69	1740
PREVALENCE	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Programs with violence (XP)	77.0	60.3	74.5	60.5	52.5	72.0	65.6	59.3	71.0	72.4	80.8	71.4	72.0	67.0
Program hours with violence	85.1	70.9	85.6	72.2	60.3	77.5	75.0	63.4	74.7	79.7	86.1	80.5	81.6	75.9
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	363	208	232	340	164	94	156	82	174	157	99	115	114	2298
Rate per program (R/P)	4.9	2.8	4.2	4.0	2.7	3.8	4.8	3.0	5.6	5.4	3.8	3.3	4.6	3.9
Rate per hour (R/H)	6.4	3.9	4.8	4.3	4.1	4.7	6.0	4.0	6.3	6.4	5.5	5.4	6.0	5.1
Duration-violent acts (hrs)	--	--	--	2.6	1.1	0.7	1.1	0.3	0.8	0.9	0.6	0.9	1.2	10.3
ROLES (% LEADING CHARACTERS)	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Violents (hurt others)	48.8	35.0	37.5	30.8	21.2	42.0	46.0	22.8	41.7	40.0	42.1	45.8	36.2	36.6
Victims (are hurt)	57.6	40.3	39.8	37.0	27.2	43.5	47.1	34.2	43.7	40.0	48.7	50.0	47.8	41.9
Involved in violence (XV)	66.3	46.1	50.0	44.2	37.0	55.1	57.5	39.2	53.1	52.4	57.9	58.3	56.5	50.6
Killers	16.6	5.3	6.2	9.2	1.1	1.4	4.6	3.8	5.2	4.8	0.0	3.1	7.2	6.4
Killed	6.3	2.4	2.8	5.1	0.0	0.0	1.1	0.0	5.2	2.9	2.6	4.2	0.0	3.0
Involved in killing (XK)	20.5	7.3	7.4	12.3	1.1	1.4	4.6	3.8	8.3	4.8	2.6	6.3	7.2	8.2
Violent : Victim Ratio	-1.18	-1.15	-1.06	-1.20	-1.28	-1.03	-1.02	-1.50	-1.05	1.00	-1.16	-1.09	-1.32	-1.14
Killer : Killed Ratio	+2.62	+2.20	+2.20	+1.80	+0.00	+0.00	+4.00	+0.00	1.00	+1.67	-0.00	-1.33	+0.00	+2.09
INDICATORS OF VIOLENCE														
Program Score:	99.6	73.8	92.5	77.0	66.0	88.9	87.2	73.3	94.8	96.0	99.4	88.8	93.2	85.0
PS = (XP) + 2(R/P) + 2(R/H)														
Character V-Score:	86.8	53.4	57.4	56.5	38.0	56.5	62.1	43.0	61.5	57.2	60.5	64.6	63.7	58.8
CS = (XV) + (XK)														
Violence Index:	186.4	127.2	149.9	133.5	104.0	145.4	149.3	116.4	156.2	153.2	159.9	153.4	156.9	143.8
VI + PS + CS														

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 4: Programs Aired 9-11 P.M. EST

	67-68	69-70	71-72	73-73*	1973*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100X)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	47	52	67	91	73	36	36	36	33	35	39	42	38	625
Program hours analyzed	49.0	58.5	63.3	95.5	79.8	36.5	36.4	42.5	33.0	34.5	39.7	39.2	39.7	647.7
Leading characters analyzed	135	144	210	317	247	103	123	112	122	124	140	151	126	2034
PREVALENCE	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Programs with violence (XP)	72.3	75.0	73.1	74.7	82.2	86.1	66.7	86.1	69.7	74.3	79.5	57.1	73.7	74.9
Program hours with violence	82.7	82.5	83.5	86.1	90.0	91.8	75.3	91.8	75.8	82.6	89.9	70.7	81.1	84.1
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	186	226	301	579	552	248	215	203	170	179	244	163	166	3432
Rate per program (R/P)	4.0	4.3	4.5	6.4	7.6	6.9	5.9	5.6	5.2	5.1	6.2	3.9	4.4	5.5
Rate per hour (R/H)	3.8	3.9	4.8	6.1	6.9	6.8	5.9	4.8	5.2	5.2	6.1	4.1	4.2	5.3
Duration-violent acts (hrs)	--	--	--	5.4	3.7	2.5	1.2	1.2	1.8	1.6	1.8	1.4	1.6	22.2
ROLES (X LEADING CHARACTERS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Violents (hurt others)	45.9	38.9	40.5	49.8	54.3	66.0	42.3	41.1	47.5	37.1	37.9	35.1	38.1	44.7
Victims (are hurt)	48.1	46.5	46.7	54.9	59.1	62.1	39.8	51.8	48.4	40.3	34.3	35.1	40.5	47.8
Involved in violence (XV)	61.5	54.2	57.1	62.5	68.4	75.7	51.2	62.5	54.1	49.2	45.7	41.7	51.6	57.4
Killers	10.4	9.0	15.7	17.0	16.6	15.5	11.4	5.4	5.7	4.0	7.1	6.0	9.5	11.4
Killed	4.4	6.2	7.1	9.1	9.3	7.8	2.4	5.4	0.0	1.6	2.1	2.0	2.4	5.4
Involved in killing (XK)	12.6	12.5	18.6	21.1	23.1	19.4	12.2	10.7	5.7	4.8	7.1	6.6	11.1	14.2
Violent : Victim Ratio	-1.05	-1.20	-1.15	-1.10	-1.09	+1.06	+1.06	-1.26	-1.02	-1.09	+1.10	1.00	-1.06	-1.07
Killer : Killed Ratio	+2.33	+1.44	+2.20	+1.86	+1.78	+2.00	+4.67	1.00	+0.00	+2.50	+3.33	+3.00	+4.00	+2.13
INDICATORS OF VIOLENCE														
Program Score: PS = (XP) + 2(R/P) + 2(R/H)	87.8	91.4	91.6	99.6	111.2	113.5	90.3	106.9	90.3	94.9	104.1	73.1	90.9	96.5
Character V-Score: CS = (XV) + (XK)	74.1	66.7	75.7	83.6	91.5	95.1	63.4	73.2	59.8	54.0	52.8	48.3	62.7	71.6
Violence Index: VI = PS + CS	161.9	158.1	167.4	183.2	202.7	208.6	153.7	180.2	150.1	148.9	156.9	121.4	153.6	168.1

* The figures given for 1973-74 include a spring 1973 sample and those for 1975 include a spring 1976 sample.

Table 3: Weekend-Daytime (Children's) Programs

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	62	107	81	114	92	49	53	48	62	66	69	44	54	901
Program hours analyzed	14.5	27.2	30.5	31.2	32.9	15.1	16.3	14.3	16.5	15.1	13.0	10.1	13.7	271.2
Leading characters analyzed	115	223	166	378	233	118	145	107	163	165	186	120	142	2261
PREVALENCE	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Programs with violence (XP)	93.5	97.2	88.9	93.9	90.2	100.0	90.6	97.9	91.9	97.0	91.3	97.7	92.6	93.8
Program hours with violence	93.1	96.6	90.4	93.2	88.4	100.0	89.9	98.8	87.9	97.2	91.4	98.3	92.7	93.1
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	323	694	489	643	469	338	258	358	284	407	418	306	350	5337
Rate per program (R/P)	5.2	6.5	6.0	5.6	5.1	6.9	4.8	7.5	4.6	6.2	6.1	6.9	6.5	5.9
Rate per hour (R/H)	22.3	25.5	16.0	12.6	14.2	22.4	15.6	25.0	17.2	26.9	30.9	30.3	25.5	19.6
Duration-violent acts (hrs)	--	--	--	2.8	1.9	1.2	1.1	1.3	0.9	1.2	1.4	0.9	1.4	14.3
ROLES (% LEADING CHARACTERS)	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Violents (hurt others)	67.8	70.4	50.0	39.2	50.6	66.9	54.5	57.9	55.2	63.0	62.4	76.7	54.2	56.7
Victims (are hurt)	80.0	82.1	65.7	63.8	70.0	79.7	66.2	80.4	60.7	78.8	71.5	85.0	75.4	72.3
Involved in violence (XV)	84.3	89.7	73.5	73.8	81.1	85.6	77.2	86.0	74.8	89.7	83.9	93.3	80.3	81.6
Killers	4.3	1.3	0.6	0.8	0.0	1.7	0.0	0.0	0.0	0.6	0.0	0.8	0.0	0.7
Killed	5.2	1.3	1.2	0.5	0.9	0.8	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.8
Involved in killing (XK)	9.6	2.2	1.2	1.3	0.9	2.5	0.0	0.0	0.0	1.2	0.0	0.8	0.0	1.4
Violent : Victim Ratio	-1.18	-1.17	-1.31	-1.63	-1.38	-1.19	-1.21	-1.39	-1.10	-1.25	-1.15	-1.11	-1.39	-1.27
Killer : Killed Ratio	-1.20	1.00	-2.00	+1.50	-0.00	+2.00	0.00	0.00	0.00	1.00	0.00	+0.00	0.00	-1.06
INDICATORS OF VIOLENCE														
Program Score: PS = (XP) + 2(R/P) + 2(R/H)	148.5	161.3	133.0	130.3	128.9	158.7	131.4	162.8	135.4	163.2	165.3	172.1	156.6	144.8
Character V-Score: CV = (XV) + (XK)	93.9	91.9	74.7	75.1	82.0	88.1	77.2	86.0	74.8	90.9	83.9	94.1	80.3	83.0
Violence Index: VI = PS + CV	242.4	253.2	207.7	205.4	210.9	246.8	208.6	248.8	210.3	254.1	249.2	266.2	236.9	227.8

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 6: Cartoons

	67-68	69-70	71-72	73-73*	1973*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	57	103	70	96	77	34	45	45	63	68	69	49	53	824
Program hours analyzed	13.9	25.3	24.5	40.7	22.8	7.7	13.1	13.1	17.3	16.5	13.5	10.4	13.2	232.2
Leading characters analyzed	109	209	139	320	182	77	125	100	167	174	186	128	137	2033
PREVALENCE	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Programs with violence ~~(X/P)~~	94.7	97.1	92.9	93.8	93.3	100.0	93.3	97.8	98.4	97.1	91.3	95.9	92.5	95.1
Program hours with violence	93.4	96.4	96.2	92.6	91.9	100.0	92.4	98.7	98.6	97.4	91.3	97.6	92.4	94.9
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	313	666	447	592	425	263	263	344	322	456	418	313	345	5167
Rate per program <u>(R/P)</u>	5.5	6.5	6.4	6.2	5.5	7.7	5.8	7.6	5.1	6.7	6.1	6.4	6.5	6.2
Rate per hour <u>(R/H)</u>	22.5	26.3	18.2	14.6	18.7	34.0	20.1	26.2	18.6	27.6	30.9	30.0	26.1	22.2
Duration-violent acts (hrs)	--	--	--	2.4	1.6	0.9	1.1	1.3	1.0	1.3	1.3	1.1	1.3	13.4
ROLES (% LEADING CHARACTERS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Violents (hurt others)	69.7	70.8	54.7	39.7	52.7	77.9	61.6	58.0	58.7	63.8	62.4	75.0	54.0	59.1
Victims (are hurt)	80.7	80.9	71.2	67.2	75.8	83.1	73.6	81.0	64.1	78.2	71.5	83.6	75.9	74.7
Involved in violence <u>(XV)</u>	85.3	89.0	80.6	74.4	85.2	89.6	82.4	86.0	79.6	89.1	83.9	92.2	80.3	83.5
Killers	4.6	1.4	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.8	0.0	0.7
Killed	5.5	1.4	1.4	0.6	1.1	0.0	0.0	0.0	0.0	0.6	0.0	0.8	0.0	0.8
Involved in killing <u>(XK)</u>	10.1	2.4	1.4	1.6	1.1	0.0	0.0	0.0	0.0	1.1	0.0	1.6	0.0	1.4
Violent : Victim Ratio	-1.16	-1.14	-1.30	-1.69	-1.44	-1.07	-1.19	-1.40	-1.09	-1.22	-1.15	-1.11	-1.40	-1.26
Killer : Killed Ratio	-1.20	1.00	-2.00	+1.50	-0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	-1.21
INDICATORS OF VIOLENCE														
Program Score: PS = (XP) + 2(R/P) + 2(R/H)	150.7	162.6	142.1	135.2	141.9	183.5	145.1	165.5	145.9	165.7	165.3	168.7	157.7	151.9
Character V-Score: CS = (XV) + (XK)	95.4	91.4	82.0	75.9	86.3	89.6	82.4	86.0	79.6	90.2	83.9	93.8	80.3	84.9
Violence Index: VI = PS + CS	246.1	254.0	224.1	211.1	228.1	273.1	227.5	251.5	225.5	255.9	249.2	262.5	238.0	236.8

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 7 All ABC Programs

	67-68	69-70	71-72	73-73*	1973*	1974	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	57	80	64	100	77	32	37	35	34	43	41	32	29	661
Program hours analyzed	39.5	43.7	46.4	77.3	50.5	21.2	23.4	24.5	23.5	24.2	22.1	21.5	20.6	438.4
Leading characters analyzed	149	203	192	326	225	97	114	92	113	147	123	102	98	1991
PREVALENCE	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Programs with violence (XP)	89.5	79.0	73.4	76.0	79.2	93.8	78.4	88.6	70.6	81.4	85.4	71.9	89.7	79.9
Program hours with violence	92.4	69.1	84.0	80.9	82.5	92.9	79.7	89.8	74.5	79.4	89.8	78.3	92.7	82.7
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	306	341	318	521	426	189	176	199	151	247	193	132	181	3380
Rate per program (R/P)	5.4	4.3	5.0	5.2	5.5	5.9	4.8	5.7	4.4	5.7	4.7	4.1	6.2	5.1
Rate per hour (R/H)	7.7	7.8	6.9	6.7	8.4	8.9	7.5	8.1	6.4	10.2	8.7	6.1	8.7	7.7
Duration-violent acts (hrs)	--	--	--	3.6	2.3	1.4	1.1	1.1	1.1	0.9	1.0	1.1	1.6	15.2
ROLES (% LEADING CHARACTERS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Violents (hurt others)	59.7	43.8	34.4	40.8	47.1	61.9	42.1	43.5	44.2	43.5	49.6	46.1	40.8	45.1
Victims (are hurt)	65.8	50.2	42.7	54.0	59.1	64.9	50.0	59.8	46.0	53.7	52.8	52.9	50.0	53.8
Involved in violence (XV)	75.8	58.1	51.0	58.6	71.1	76.3	60.5	66.3	52.2	64.6	65.8	58.8	59.2	62.4
Killers	13.4	3.4	8.9	8.9	4.4	4.1	0.0	3.3	0.9	1.4	1.6	4.9	8.2	5.4
Killed	5.4	2.0	5.7	4.3	3.6	3.1	0.0	0.0	0.0	0.7	0.8	2.9	2.0	2.8
Involved in killing (XK)	18.1	4.9	10.9	11.0	7.6	7.2	0.0	3.3	0.9	2.0	2.4	5.9	9.2	7.2
Violent : Victim Ratio	-1.10	-1.15	-1.24	-1.32	-1.25	-1.05	-1.19	-1.38	-1.04	-1.23	-1.06	-1.15	-1.22	-1.20
Killer : Killed Ratio	+2.50	+1.75	+1.55	+2.07	+1.25	+1.33	0.00	+0.00	+0.00	+2.00	+2.00	+1.67	+4.00	+1.96
INDICATORS OF VIOLENCE														
Program Score: PS = (XP) + 2(R/P) + 2(R/H)	115.7	99.1	97.1	99.9	107.2	123.4	103.0	116.2	92.3	113.2	112.2	92.3	119.5	105.5
Character V-Score: CS = (XV) + (XK)	94.0	63.1	62.0	69.6	78.7	83.5	60.5	69.6	53.1	66.6	68.2	64.7	68.4	69.6
Violence Index: VI = PS + CS	209.7	162.2	159.1	169.5	185.8	206.9	163.5	185.8	145.4	179.8	180.4	157.0	187.9	175.1

* The figures given for 1973-74 include a spring 1973 sample and those for 1975 include a spring 1976 sample.

Table B: ABC Prime-Time Programs

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	40	42	43	61	41	19	21	24	23	24	24	22	18	402
Program hours analyzed	35.0	35.0	36.8	39.5	40.0	17.0	18.0	20.5	19.0	19.9	18.2	19.2	16.7	354.9
Leading characters analyzed	115	123	148	207	136	60	66	65	81	96	75	79	64	1315
PREVALENCE	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Programs with violence (XP)	85.0	84.8	83.1	87.2	73.2	89.5	66.7	83.3	60.9	66.7	83.3	63.6	83.3	71.1
Program hours with violence	91.4	62.1	82.5	78.6	82.5	91.2	75.0	87.8	71.1	74.9	89.0	76.6	91.0	80.4
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	210	128	176	317	289	110	90	94	80	115	101	84	108	1902
Rate per program (R/P)	5.3	3.0	4.1	5.2	7.0	5.8	4.3	3.9	3.5	4.8	4.2	3.8	6.0	4.7
Rate per hour (R/H)	6.0	3.7	4.8	3.3	7.5	6.5	5.0	4.6	4.2	5.8	5.5	4.4	6.4	5.3
Duration-violent acts (hrs)	--	--	--	2.7	1.9	1.1	0.7	0.6	0.7	0.5	0.6	0.8	1.3	10.9
ROLES (% LEADING CHARACTERS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Violents (hurt others)	60.0	32.5	33.8	43.5	49.3	63.3	33.3	32.3	30.9	35.4	37.3	43.0	35.9	41.1
Victims (are hurt)	62.6	37.4	39.9	51.2	54.4	61.7	34.8	50.8	33.3	35.4	37.3	46.8	40.6	45.8
Involved in violence (XV)	73.9	43.1	49.3	55.6	66.2	75.0	47.0	60.0	38.3	46.9	50.7	54.4	51.6	54.8
Killers	16.5	5.7	10.8	13.0	7.4	3.3	0.0	4.6	1.2	2.1	2.7	6.3	12.5	7.8
Killed	6.1	3.3	6.8	6.3	5.1	3.3	0.0	0.0	0.0	1.0	1.3	3.8	3.1	3.8
Involved in killing (XK)	21.7	8.1	13.5	15.9	11.8	6.7	0.0	4.6	1.2	3.1	4.0	7.6	14.1	10.1
Violent : Victim Ratio	-1.04	-1.15	-1.18	-1.18	-1.10	+1.03	-1.04	-1.57	-1.08	1.00	1.00	-1.09	-1.13	-1.11
Miller : Killed Ratio	+2.71	+1.75	+1.60	+2.08	+1.43	1.00	0.00	+0.00	+0.00	+2.00	+2.00	+1.67	+4.00	+2.04
INDICATORS OF VIOLENCE														
Program Score:	107.5	68.2	82.9	88.3	101.7	114.0	85.3	100.3	76.2	87.9	102.7	80.0	108.1	91.1
PS = (XP) + 2(R/P) + 2(R/H)														
Character V-Score:	95.7	51.2	62.8	71.5	77.9	81.7	47.0	64.6	39.5	50.0	54.7	62.0	65.7	64.9
CS = (XV) + (XK)														
Violence Index:	203.2	119.4	145.7	159.8	179.7	195.7	132.3	165.0	115.8	137.9	157.4	142.0	173.8	156.0
VI = PS + CS														

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 9: ABC Weekend-Daytime (Children's) Programs

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	17	38	21	39	36	13	16	11	11	19	17	10	11	259
Program hours analyzed	4.5	8.7	9.7	17.8	10.5	4.2	5.4	4.0	4.5	4.3	3.8	2.2	3.9	835
Leading characters analyzed	34	80	44	119	89	37	48	27	32	31	48	23	34	666
PREVALENCE	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Programs with violence (XP)	100.0	97.4	90.5	89.7	86.1	100.0	93.8	100.0	90.9	100.0	88.2	90.0	100.0	93.4
Program hours with violence	100.0	97.1	89.7	88.8	82.5	100.0	95.3	100.0	88.9	100.0	93.6	92.6	100.0	92.5
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	96	213	142	204	137	79	86	105	71	132	92	48	73	1478
Rate per program (R/P)	5.6	5.6	6.8	5.2	3.8	6.1	5.4	9.5	6.5	6.9	5.4	4.8	6.6	5.7
Rate per hour (R/H)	21.3	24.6	14.7	11.4	13.0	19.0	16.0	26.3	15.8	30.5	24.0	21.3	18.8	17.7
Duration-violent acts (hrs)	--	--	--	0.9	0.4	0.3	0.4	0.5	0.3	0.5	0.4	0.3	0.3	4.3
ROLES (% LEADING CHARACTERS)	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Violents (hurt others)	58.8	61.2	36.4	36.1	43.8	59.5	54.2	70.4	78.1	58.8	68.8	36.5	50.0	52.9
Victims (are hurt)	76.5	70.0	52.3	58.8	66.3	70.3	70.8	81.5	78.1	88.2	77.1	73.9	67.6	69.5
Involved in violence (XV)	82.4	81.2	56.8	63.9	78.7	78.4	79.2	81.5	87.5	98.0	89.6	73.9	78.5	77.5
Killers	2.9	0.0	2.3	1.7	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Killed	2.9	0.0	2.3	0.8	1.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Involved in killing (XK)	5.9	0.0	2.3	2.5	1.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Violent : Victim Ratio	-1.30	-1.14	-1.44	-1.63	-1.51	-1.18	-1.31	-1.16	1.00	-1.50	-1.12	-1.31	-1.35	-1.31
Killer : Killed Ratio	1.00	0.00	1.00	+2.00	-0.00	+2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	+1.20
INDICATORS OF VIOLENCE														
Program Score: PS = (XP) + 2(R/P) + 2(R/H)	154.0	157.7	133.4	123.1	119.8	150.1	136.6	171.6	135.4	174.8	147.0	142.2	150.8	140.2
Character V-Score: CS = (XV) + (XK)	88.2	81.2	59.1	66.4	79.8	86.5	79.2	81.5	87.5	98.0	89.6	73.9	73.5	79.0
Violence Index: VI = PS + CS	242.2	239.0	192.5	189.5	199.6	236.6	215.8	253.1	222.9	272.8	236.6	216.1	224.3	219.2

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 10: All CBS Programs

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	67	85	78	95	80	41	32	48	56	51	50	49	48	800
Program hours analyzed	39.5	48.0	49.0	73.1	50.2	24.0	32.2	26.8	28.5	26.5	25.7	24.9	27.2	475.6
Leading characters analyzed	152	198	189	336	232	101	143	122	152	149	145	138	124	2181
PREVALENCE	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Programs with violence (XP)	71.6	77.6	74.4	74.7	67.5	82.9	71.2	85.4	87.5	84.3	86.0	75.5	77.1	77.2
Program hours with violence	75.3	79.9	79.7	80.9	72.1	83.3	73.8	83.2	81.6	80.8	88.3	73.2	73.4	78.6
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	248	384	376	539	320	199	268	263	284	282	339	228	228	3958
Rate per program (R/P)	3.7	4.5	4.8	5.7	4.0	4.9	5.1	5.5	5.1	5.5	6.8	4.6	4.7	4.9
Rate per hour (R/H)	6.3	8.0	7.7	7.4	6.4	8.3	8.3	9.8	9.9	10.6	13.2	9.2	8.4	8.3
Duration-violent acts (hrs)	--	--	--	3.5	1.9	1.0	1.1	1.1	1.5	1.2	1.2	1.3	0.9	14.6
ROLES (% LEADING CHARACTERS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Violents (hurt others)	40.1	51.0	42.9	39.0	39.2	50.5	49.6	41.8	53.9	52.3	57.9	52.2	44.3	46.3
Victims (are hurt)	49.3	56.6	51.9	50.9	47.8	36.4	49.6	56.6	57.9	58.4	54.5	52.2	55.6	53.1
Involved in violence (XV)	56.6	63.6	60.3	60.1	55.6	67.3	60.8	63.9	69.1	67.8	66.9	61.6	65.3	62.3
Killers	7.9	4.0	9.5	8.6	6.0	5.0	7.7	2.5	3.3	3.4	0.7	0.7	4.8	5.4
Killed	5.3	3.0	2.6	6.0	4.3	1.0	0.7	0.8	0.7	2.0	0.7	1.4	0.8	2.7
Involved in killing (XK)	11.2	6.6	10.1	12.2	9.1	5.0	7.7	3.3	3.3	3.4	0.7	2.2	5.6	7.0
Violent : Victim Ratio	-1.23	-1.11	-1.21	-1.31	-1.22	-1.12	1.00	-1.35	-1.07	-1.11	+1.06	1.00	-1.25	-1.15
Killer : Killed Ratio	+1.50	+1.33	+3.60	+1.45	+1.40	+5.00	+11.00	+3.00	+5.00	+1.67	+1.00	-2.00	+6.00	+1.97
INDICATORS OF VIOLENCE														
Program Score: PS = (XP) + 2(R/P) + 2(R/H)	91.6	102.7	99.4	100.8	88.3	109.2	98.0	116.0	117.5	116.5	126.0	103.1	103.3	103.6
Character V-Score: CS = (XV) + (XK)	67.8	70.2	70.4	72.3	64.7	72.3	68.5	67.2	72.4	71.2	67.6	63.8	70.9	69.3
Violence Index: VI = PS + CS	159.4	172.9	169.7	173.1	152.9	181.5	166.5	183.3	189.9	187.7	193.6	166.9	174.2	172.9

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 11: CBS Prime-Time Programs

	67-68	69-70	71-72	73-74*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	44	46	42	63	48	24	31	22	24	22	24	33	22	445
Program hours analyzed	34.5	36.5	37.5	57.0	37.8	18.0	25.9	20.3	22.0	20.2	21.5	21.9	22.0	375.0
Leading characters analyzed	113	122	123	219	153	61	91	65	73	78	80	95	63	1336
PREVALENCE	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Programs with violence (XP)	59.1	63.0	66.7	63.5	50.0	70.8	61.3	68.2	79.2	68.2	79.2	63.6	63.6	64.3
Program hours with violence	72.5	75.3	77.3	76.3	65.6	77.8	71.0	77.8	79.5	75.3	88.4	69.5	70.4	74.7
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	127	124	176	323	168	84	173	89	129	82	148	107	68	1798
Rate per program (R/P)	2.9	2.7	4.2	5.1	3.5	3.5	5.6	4.0	5.4	3.7	6.2	3.2	3.1	4.0
Rate per hour (R/H)	3.7	3.4	4.7	5.7	4.5	4.7	6.7	4.4	5.9	4.0	6.9	4.9	3.1	4.8
Duration-violent acts (hrs)	--	--	--	2.6	1.1	0.4	0.8	0.5	1.1	0.6	0.6	0.9	0.5	9.3
ROLES (% LEADING CHARACTERS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Violents (hurt others)	27.4	33.6	37.4	35.6	30.7	42.6	41.8	33.8	50.7	34.6	40.0	36.8	34.9	36.1
Victims (are hurt)	36.3	38.5	42.3	42.9	36.6	37.7	39.6	36.9	53.4	35.9	38.7	36.8	42.9	39.9
Involved in violence (XV)	45.1	45.1	49.6	48.9	42.5	54.1	49.4	44.6	64.4	44.9	50.0	45.3	57.1	48.4
Killers	8.8	5.7	14.6	12.8	9.2	8.2	12.1	4.6	6.8	5.1	1.2	1.0	9.5	8.5
Killed	4.4	4.1	4.1	9.1	5.9	1.6	1.1	1.5	1.4	3.8	1.2	2.1	1.6	4.1
Involved in killing (XK)	10.6	9.0	15.4	18.3	13.1	8.2	12.1	6.2	6.8	5.1	1.2	3.2	11.1	10.6
Violent : Victim Ratio	-1.32	-1.15	-1.13	-1.21	-1.19	+1.13	+1.05	-1.09	-1.05	-1.04	+1.03	1.00	-1.23	-1.11
Killer : Killed Ratio	+2.00	+1.40	+3.60	+1.40	+1.56	+5.00	+11.00	+3.00	+5.00	+1.33	1.00	-2.00	+6.00	+2.05
INDICATORS OF VIOLENCE														
Program Score:														
PS = (XP) + 2(R/P) + 2(R/H)	72.2	75.2	84.4	85.1	65.9	87.2	85.9	85.1	101.6	83.6	105.4	79.8	76.0	81.9
Character V-Score:														
CS = (XV) + (XK)	55.8	54.1	65.0	67.1	55.6	62.3	61.5	50.8	71.2	50.0	51.2	48.5	68.2	59.0
Violence Index:														
VI = PS + CS	128.0	129.3	149.5	152.2	121.5	149.5	147.4	135.8	172.9	133.6	156.6	128.3	144.2	140.9

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 12: CBB Weekend-Daytime (Children's) Programs

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	23	39	36	32	32	17	21	26	32	29	26	16	26	355
Program hours analyzed	5.0	11.5	11.5	16.1	12.4	6.0	6.3	6.3	6.3	6.2	4.2	3.0	5.2	100.6
Leading characters analyzed	39	76	66	117	79	40	52	57	79	71	65	43	61	845
PREVALENCE	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Programs with violence (XP)	95.7	94.9	83.3	96.9	93.8	100.0	85.7	100.0	93.8	96.6	92.3	100.0	88.5	93.5
Program hours with violence	95.0	94.2	87.5	96.9	92.0	100.0	85.5	100.0	88.5	98.6	88.2	100.0	85.7	93.2
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	121	260	200	216	152	115	95	174	155	200	191	121	160	2160
Rate per program (R/P)	5.3	6.7	5.6	6.8	4.8	6.8	4.5	6.7	4.8	6.9	7.3	7.6	6.1	6.1
Rate per hour (R/H)	24.2	22.6	17.4	13.4	12.2	19.2	15.2	26.8	23.7	32.0	44.9	40.3	30.5	21.5
Duration-violent acts (hrs)	--	--	--	0.8	0.7	0.5	0.3	0.5	0.4	0.5	0.7	0.3	0.5	5.3
ROLES (% LEADING CHARACTERS)	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Violents (hurt others)	76.9	78.9	53.0	45.3	55.7	62.5	63.5	50.9	57.0	71.8	80.0	86.0	94.1	62.4
Victims (are hurt)	87.2	85.5	69.7	65.8	69.6	85.0	67.3	78.9	62.0	83.1	73.8	86.0	68.9	74.1
Involved in violence (IV)	89.7	93.4	80.3	81.2	81.0	87.5	80.8	86.0	73.4	93.0	87.7	97.7	73.8	84.3
Killers	5.1	1.3	0.0	0.9	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.6
Killed	7.7	1.3	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Involved in killing (KM)	12.8	2.6	0.0	0.9	1.3	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.2
Violent : Victim Ratio	-1.13	-1.08	-1.31	-1.45	-1.25	-1.36	-1.06	-1.55	-1.09	-1.16	+1.08	1.00	-1.27	-1.19
Killer : Killed Ratio	-1.50	1.00	0.00	+0.00	-0.00	0.00	0.00	0.00	0.00	+0.00	0.00	0.00	0.00	+1.20
INDICATORS OF VIOLENCE														
Program Score: PB = (XP) + 2(R/P) + 2(R/H)	154.6	153.4	129.3	137.2	127.7	151.9	130.7	166.9	150.8	174.4	196.7	193.8	161.7	148.7
Character V-Score: CB = (IV) + (KM)	102.6	96.1	80.3	82.1	82.3	87.5	80.8	86.0	73.4	94.4	87.7	97.7	73.8	85.5
Violence Index: VI = PB + CB	257.1	249.5	209.6	219.2	210.0	239.4	211.5	252.9	224.2	268.8	284.4	293.5	235.5	234.2

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 13: All NBC Programs

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	39	67	61	96	69	37	32	28	36	36	43	40	40	644
Program hours analyzed	41.5	47.3	46.9	75.2	52.3	26.4	23.4	26.1	25.2	23.5	23.4	24.3	24.6	460.1
Leading characters analyzed	154	172	171	325	207	92	98	84	116	98	134	127	115	1893
PREVALENCE	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Programs with violence (XP)	84.7	91.0	93.4	83.3	87.0	91.9	84.4	78.6	80.6	91.7	86.0	80.0	82.5	86.2
Program hours with violence	87.3	92.6	93.6	86.7	90.4	92.4	82.9	84.0	77.2	94.3	89.6	81.6	86.8	88.2
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	318	403	328	502	439	292	185	181	193	214	229	224	221	3729
Rate per program (R/P)	5.4	6.0	5.4	5.2	6.4	7.9	5.8	6.5	5.4	5.9	5.3	5.6	5.5	5.8
Rate per hour (R/H)	7.7	8.5	7.0	6.7	8.4	11.1	7.9	6.9	7.7	9.1	9.8	9.2	8.9	8.1
Duration-violent acts (hrs)	--	--	--	3.8	2.6	2.1	1.2	0.7	1.0	1.5	1.5	0.9	1.5	16.9
ROLES (% LEADING CHARACTERS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Violents (hurt others)	58.4	55.2	50.9	40.6	45.4	70.7	53.1	41.7	48.3	51.0	41.8	55.1	47.8	49.5
Victims (are hurt)	66.2	69.2	56.7	54.2	55.6	73.9	59.2	56.0	51.7	57.1	55.2	60.6	63.5	59.3
Involved in violence (XV)	76.0	75.0	69.0	65.5	66.2	81.5	70.4	64.3	64.7	69.4	64.2	67.7	68.7	68.9
Killers	13.6	7.0	5.8	8.0	9.2	10.9	7.1	3.6	5.2	4.1	5.2	5.5	2.6	7.1
Killed	5.8	4.1	3.5	3.7	3.4	5.4	3.1	6.0	3.4	2.0	2.2	1.6	0.0	3.4
Involved in killing (XK)	16.9	8.7	8.2	9.5	11.1	13.0	8.2	9.5	7.8	5.1	5.9	6.3	2.6	8.9
Violent : Victim Ratio	-1.13	-1.25	-1.11	-1.33	-1.22	-1.05	-1.11	-1.34	-1.07	-1.09	-1.32	-1.10	-1.33	-1.19
Killer : Killed Ratio	+2.33	+1.71	+1.67	+2.17	+2.71	+2.00	+2.33	-1.67	+1.50	+2.00	+2.33	+3.50	+0.00	+2.08
INDICATORS OF VIOLENCE														
Program Score: PS = (XP) + 2(R/P) + 2(R/H)	110.9	120.1	119.2	107.1	116.5	129.8	111.8	105.4	106.6	121.7	116.2	109.6	111.3	114.0
Character V-Score: CS = (XV) + (XK)	92.9	83.7	77.2	75.1	77.3	94.6	78.6	73.8	72.4	74.5	70.1	74.0	71.3	77.8
Violence Index: VI = PS + CS	203.7	203.9	195.4	182.2	193.8	224.4	190.4	179.2	179.0	196.2	186.3	183.6	182.6	191.8

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 14: NBC Prime-Time Programs

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	37	37	37	53	45	18	16	17	17	18	17	22	23	357
Program hours analyzed	36.5	40.3	37.5	58.0	42.3	21.5	18.5	22.3	19.7	19.0	18.0	19.5	20.0	373.0
Leading characters analyzed	112	105	115	183	142	51	53	61	64	55	61	73	68	1143
PREVALENCE	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Programs with violence (XP)	83.8	83.8	91.9	73.6	84.4	83.3	75.0	70.6	70.6	88.9	76.5	63.6	73.9	79.6
Program hours with violence	87.7	91.3	93.3	84.5	90.6	90.7	81.1	82.0	74.6	94.7	88.9	76.9	85.0	86.9
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	212	182	181	279	259	148	108	102	135	139	94	87	104	2030
Rate per program (R/P)	5.7	4.9	4.9	5.3	5.8	8.2	6.7	6.0	7.9	7.7	5.3	3.9	4.5	5.7
Rate per hour (R/H)	5.8	4.5	4.8	4.8	6.1	6.9	5.8	4.6	6.9	7.3	5.2	4.5	5.2	5.4
Duration-violent acts (hrs)	--	--	--	2.7	1.8	1.6	0.9	0.4	0.8	1.3	1.2	0.5	1.0	12.2
ROLES (X LEADING CHARACTERS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Violents (hurt others)	55.4	44.8	47.8	43.7	41.5	64.7	60.4	34.4	56.3	49.1	40.9	38.4	41.2	46.6
Victims (are hurt)	62.5	54.3	49.6	44.8	46.5	66.7	58.4	45.9	54.7	54.5	42.6	39.7	45.6	50.4
Involved in violence (XV)	74.1	61.9	64.3	57.4	57.7	74.5	69.8	54.1	60.9	65.4	49.2	45.2	51.5	60.4
Killers	17.0	9.5	8.7	14.2	13.4	19.6	13.2	4.9	9.4	7.3	11.3	8.2	4.4	11.4
Killed	6.2	4.8	4.3	6.0	4.9	9.8	5.7	8.2	6.3	1.8	4.9	2.7	0.0	5.1
Involved in killing (XK)	19.6	11.4	11.3	16.4	16.2	23.5	15.1	13.1	14.1	7.3	13.1	9.6	4.4	13.9
Violent : Victim Ratio	-1.13	-1.21	-1.04	-1.02	-1.12	-1.03	+1.03	-1.33	+1.03	-1.07	-1.04	-1.04	-1.11	-1.08
Killer : Killed Ratio	+2.71	+2.00	+2.00	+2.36	+2.71	+2.00	+2.33	-1.67	+1.30	+4.00	+2.33	+3.00	+0.00	+2.24
INDICATORS OF VIOLENCE														
Program Score: PS = (XP) + 2(R/P) + 2(R/H)	106.9	102.7	111.3	93.7	108.2	113.5	100.0	91.8	100.2	118.9	97.9	80.4	93.3	101.8
Character V-Score: CS = (XV) + (XK)	93.7	73.3	75.7	73.8	73.9	98.0	84.9	67.2	75.0	72.7	62.3	54.8	55.9	74.3
Violence Index: VI = PS + CS	200.6	176.0	187.0	167.5	182.1	211.6	184.9	159.0	175.2	191.6	160.2	135.2	149.2	176.1

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 15: NBC Weekend-Daytime (Children's) Programs

	67-68	69-70	71-72	73-73*	1975*	1976	1977	1978	1979	1980	1981	1982	1983	TOTAL
SAMPLES (100%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Programs analyzed	22	30	24	43	24	19	16	11	19	18	26	18	17	287
Program hours analyzed	9.0	7.0	9.4	17.2	10.0	4.9	4.9	3.8	5.5	4.5	5.4	4.8	4.6	87.1
Leading characters analyzed	42	67	56	142	65	41	45	23	52	43	73	54	47	750
PREVALENCE	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Programs with violence (XP)	86.4	100.0	95.8	95.3	91.7	100.0	93.8	90.9	89.5	94.4	92.3	100.0	94.1	94.4
Program hours with violence	85.0	100.0	94.7	94.2	90.0	100.0	89.8	95.7	86.4	92.6	92.3	100.0	94.5	93.5
RATE	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Number of violent acts	106	221	147	223	180	144	77	79	98	75	135	137	117	1699
Rate per program (R/P)	4.8	7.4	6.1	5.2	7.5	7.6	4.8	7.2	3.1	4.2	5.2	7.6	6.9	5.9
Rate per hour (R/H)	21.2	31.6	15.6	12.9	18.0	29.4	15.7	20.6	10.5	16.7	24.9	28.4	25.5	19.5
Duration-violent acts (hrs)	--	--	--	1.1	0.8	0.4	0.3	0.3	0.3	0.2	0.3	0.4	0.5	4.7
ROLES (% LEADING CHARACTERS)	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Violents (hurt others)	66.7	71.6	57.1	36.6	53.8	78.0	44.4	60.9	38.5	53.5	42.5	77.8	57.4	53.9
Victims (are hurt)	76.2	92.5	71.4	66.2	75.4	82.9	60.0	82.6	48.1	60.5	65.8	88.9	89.4	72.8
Involved in violence (XV)	81.0	95.5	78.6	76.1	84.6	90.2	71.1	91.3	69.2	74.4	76.7	98.1	93.6	82.1
Killers	4.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.7
Killed	4.8	3.0	1.8	0.7	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.9
Involved in killing (XK)	9.5	4.5	1.8	0.7	0.0	0.0	0.0	0.0	0.0	2.3	0.0	1.9	0.0	1.5
Violent : Victim Ratio	-1.14	-1.29	-1.25	-1.81	-1.40	-1.06	-1.35	-1.36	-1.25	-1.13	-1.55	-1.14	-1.55	-1.35
Killer : Killed Ratio	1.00	1.00	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	+0.00	0.00	-1.40
INDICATORS OF VIOLENCE														
Program Score: PS = (XP) + 2(R/P) + 2(R/H)	138.4	177.9	139.4	131.6	142.7	173.9	134.8	146.5	116.7	136.2	152.5	172.0	158.9	145.2
Character V-Score: CS = (XV) + (XK)	90.5	100.0	80.4	76.8	84.6	90.2	71.1	91.3	69.2	76.7	76.7	100.0	93.6	83.6
Violence Index: VI = PS + CS	228.9	277.9	219.7	208.4	227.3	264.2	205.9	237.8	185.9	212.9	229.2	272.0	252.5	228.8

* The figures given for 1973-74 include a spring 1975 sample and those for 1975 include a spring 1976 sample.

Table 16

Components of Images of Violence Index

	Percent Overestimating Chances of Involvement in Violence			Percent Agreeing that Women are More likely to Be Victims of Crime			Percent Saying Their Neighborhoods are Only Somewhat Safe or not Safe at all			Percent Saying that Fear of Crime Is a very Serious Problem			Percent Agreeing that Crime is Rising		
	Percent Light Viewers ²	CD ³	gamma	Percent Light Viewers ²	CD ³	gamma	Percent Light Viewers ²	CD ³	gamma	Percent Light Viewers ²	CD ³	gamma	Percent Light Viewers ²	CD ³	gamma
Overall	71	+10	.14***	72	+10	.18***	55	+11	.10***	20	+9	.12***	94	+4	.30***
controlling for:															
Age															
18-29	76	+14	.28***	73	+6	.11**	49	+11	.09**	16	+11	.21***	93	+4	.27***
30-54	68	+9	.11**	70	+10	.18***	53	+12	.09***	17	+11	.12***	96	+3	.27**
over 55	71	+6	.07*	77	+10	.22***	63	+9	.06*	31	+1	-.01	94	+6	.38***
Education															
No College	76	+7	.13***	70	+12	.20***	58	+10	.07***	24	+8	.11***	94	+3	.28***
Some College	53	+9	.10*	76	+7	.06	49	+9	.07*	13	+5	.09*	91	+5	.22**
Newspaper Reading															
Sometimes	75	+14	.23***	70	+15	.26***	58	+17	.10***	23	+11	.14***	94	+6	.27***
Everyday	69	+7	.10***	74	+17	.13***	53	+8	.09***	18	+8	.11***	95	+4	.36***
Race															
White	69	+10	.13***	73	+9	.17***	53	+10	.09***	17	+10	.14***	94	+4	.29***
Non-White	88	+7	.25**	70	+12	.21**	72	+16	.09*	44	+6	-.07	95	+6	.37**
Urban Proximity															
Clt. over 250,000	69	+10	.13**	77	0	-.00	71	+14	.19***	26	+20	.19***	98	+10	.52***
City under 250,000	74	+3	.05	64	+24	.42***	59	+8	.06	22	+5	.09*	89	+11	.57***
Suburban	67	+13	.18***	73	+10	.19***	50	+13	.13***	19	+10	.12***	96	+2	.13
Non-Metropolitan	77	+8	.13**	70	+9	.17***	51	+7	.01	18	+2	.08**	98	0	.10
Income															
under \$10,000	84	0	.04	67	+18	.32***	61	+14	.10***	35	+2	-.00	96	+4	.51***
\$10,000 - \$25,000	68	+8	.12***	74	+6	.12	53	+6	.06	16	+9	.16***	93	+5	.35***
over \$25,000	62	+18	.13**	76	0	-.03	49	+1	-.01	10	+16	.11**	96	+1	-.13
Sex															
Male	68	+8	.09**	68	+10	.20***	38	+16	.16***	21	+4	.07**	95	+2	.07
Female	76	+8	.13***	78	+4	.14***	73	+1	-.01	20	+12	.14***	94	+5	.55***

1

"On the average weekday, about how many hours do you personally watch television?"

Light: under 2 hours

Medium: 2 - 4 hours

Heavy: over 4 hours

2

Percent Light Viewers = percent of light viewers giving the "Television Answer"

3

CD = Cultivation Differential: percent of heavy viewers minus the percent of light viewers giving the "Television Answer"

* p < .05 (tau)

** p < .01 (tau)

*** p < .001 (tau)

Data Source: Opinion Research Corporation

Table 17: Percent who are High Scorers on an Index of Sexism

	Television Viewing								CD (XHeavy- ZLight)	gamma	Total N
	Total		Light		Medium		Heavy				
	X	N	X	N	X	N	X	N			
Overall	34	(2160)	31	(477)	33	(948)	38	(735)	+ 7	.098***	(6309)
controlling for:											
<u>Age</u>											
18 - 29	22	(358)	20	(71)	20	(139)	25	(148)	+ 5	.100*	(1655)
30 - 34	29	(816)	27	(211)	30	(393)	33	(212)	+ 6	.087**	(2772)
35 and over	52	(976)	51	(192)	51	(412)	55	(372)	+ 4	.061	(1860)
<u>Sex</u>											
Male	34	(933)	30	(219)	33	(444)	37	(270)	+ 7	.099**	(2786)
Female	35	(1227)	32	(258)	33	(504)	39	(465)	+ 7	.095***	(3523)
<u>Race</u>											
White	33	(1816)	29	(404)	32	(810)	39	(602)	+10	.138***	(5440)
Non-white	40	(344)	51	(73)	40	(138)	34	(133)	-17	-.193***	(869)
<u>Education</u>											
No college	42	(1763)	45	(359)	41	(758)	42	(646)	- 3	-.025	(4163)
Some college	18	(389)	16	(116)	18	(187)	22	(86)	+ 6	.120*	(2130)
<u>Income</u>											
under \$10,000	47	(931)	50	(191)	47	(374)	45	(366)	- 5	-.052	(1990)
\$10,000-\$19,999	34	(659)	31	(142)	33	(306)	37	(211)	+ 6	.077	(1958)
over \$20,000	21	(397)	19	(114)	20	(195)	23	(88)	+ 4	.069	(1927)
<u>Political Orientation</u>											
Conservative	40	(686)	38	(178)	38	(302)	48	(206)	+10	.111**	(1693)
Moderate	34	(716)	31	(130)	34	(323)	37	(263)	+ 6	.073	(2077)
Liberal	28	(434)	21	(89)	28	(190)	33	(155)	+12	.183***	(1572)

* p<.05
** p<.01
*** p<.001

Data Source: NORC 1975, 1977, 1978, 1982, and 1983 General Social Surveys
Television Viewing: Light -- under 2 hours; medium -- 2 to 4 hours; heavy -- over 4 hours.

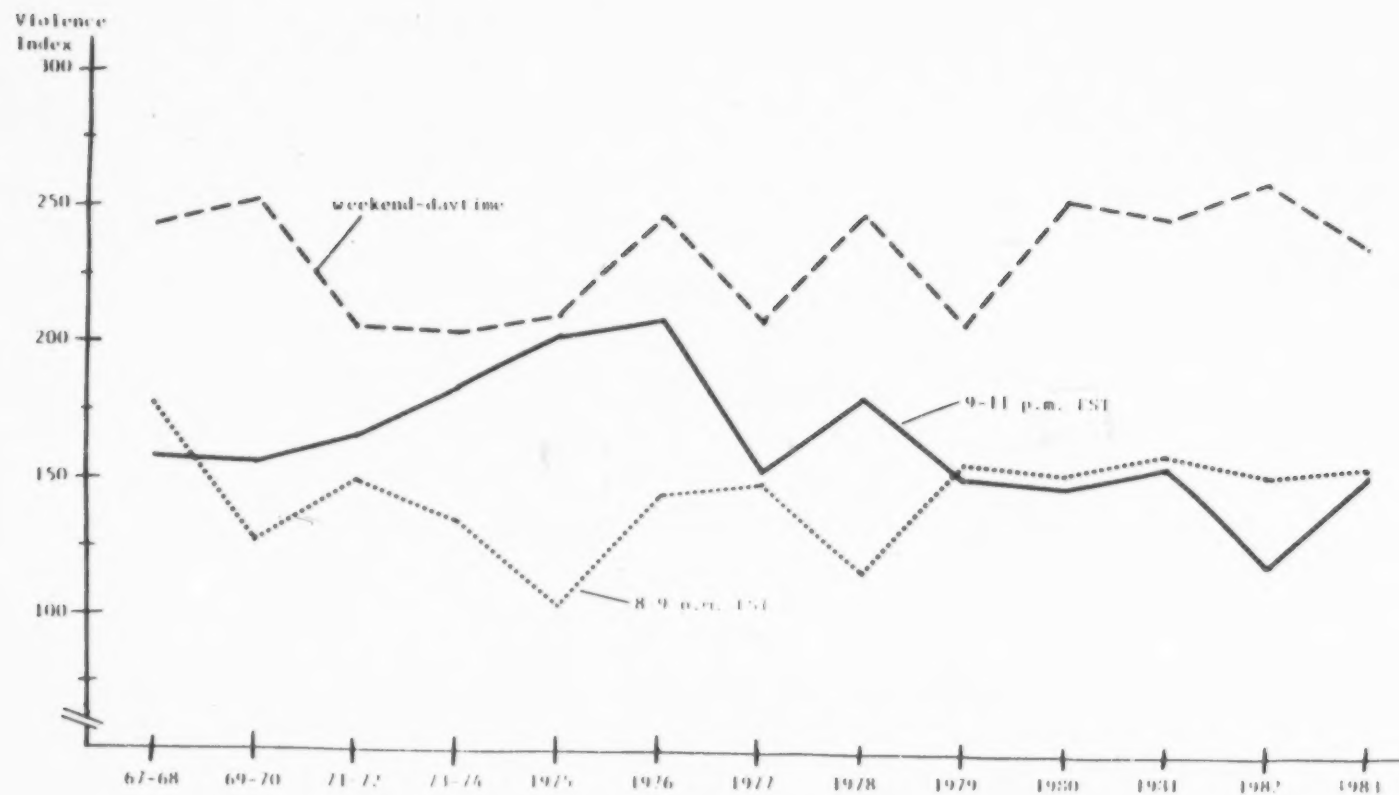


Figure 1: Violence Index in Children's and Prime-Time Programming (1967-1981)

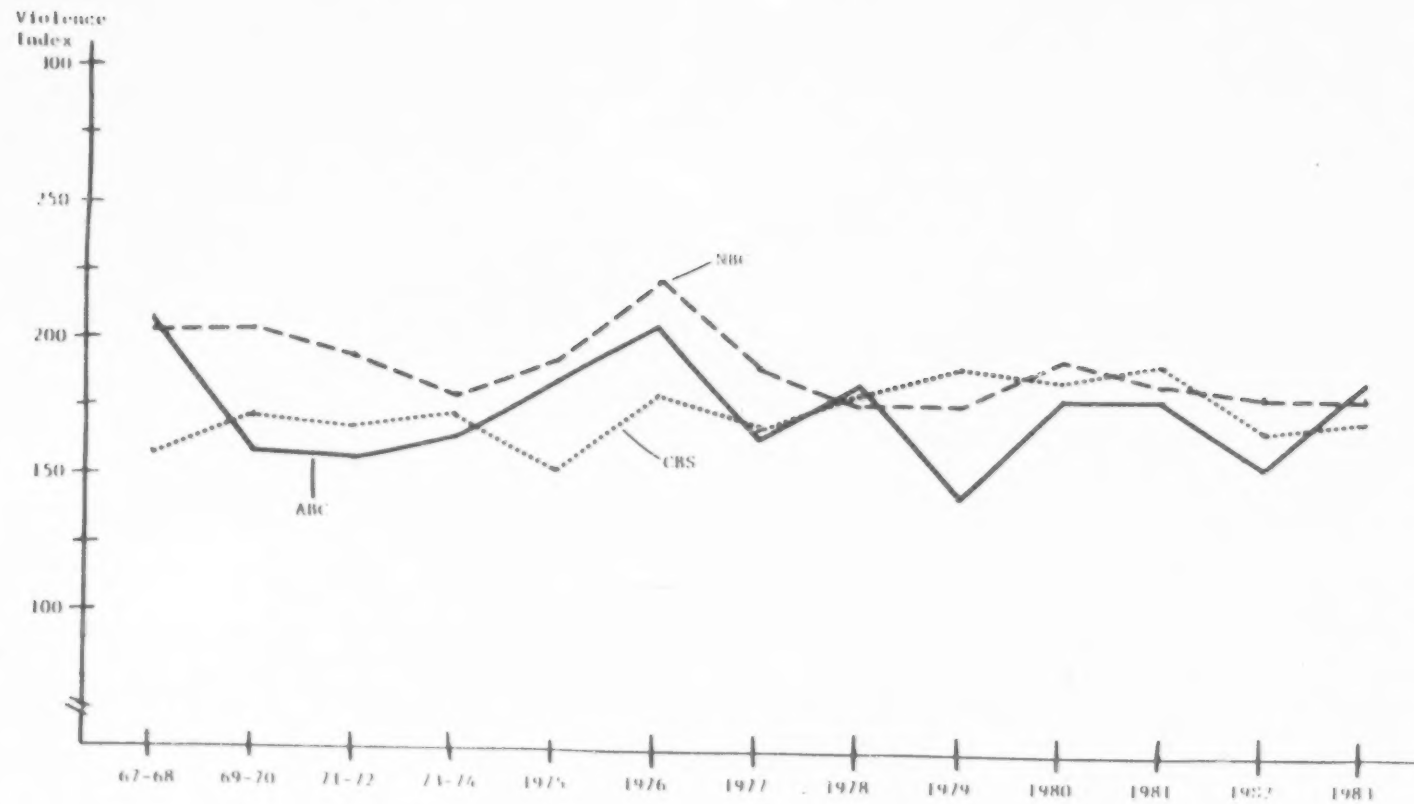


Figure 2: Violence Index by Network (1967-1981)

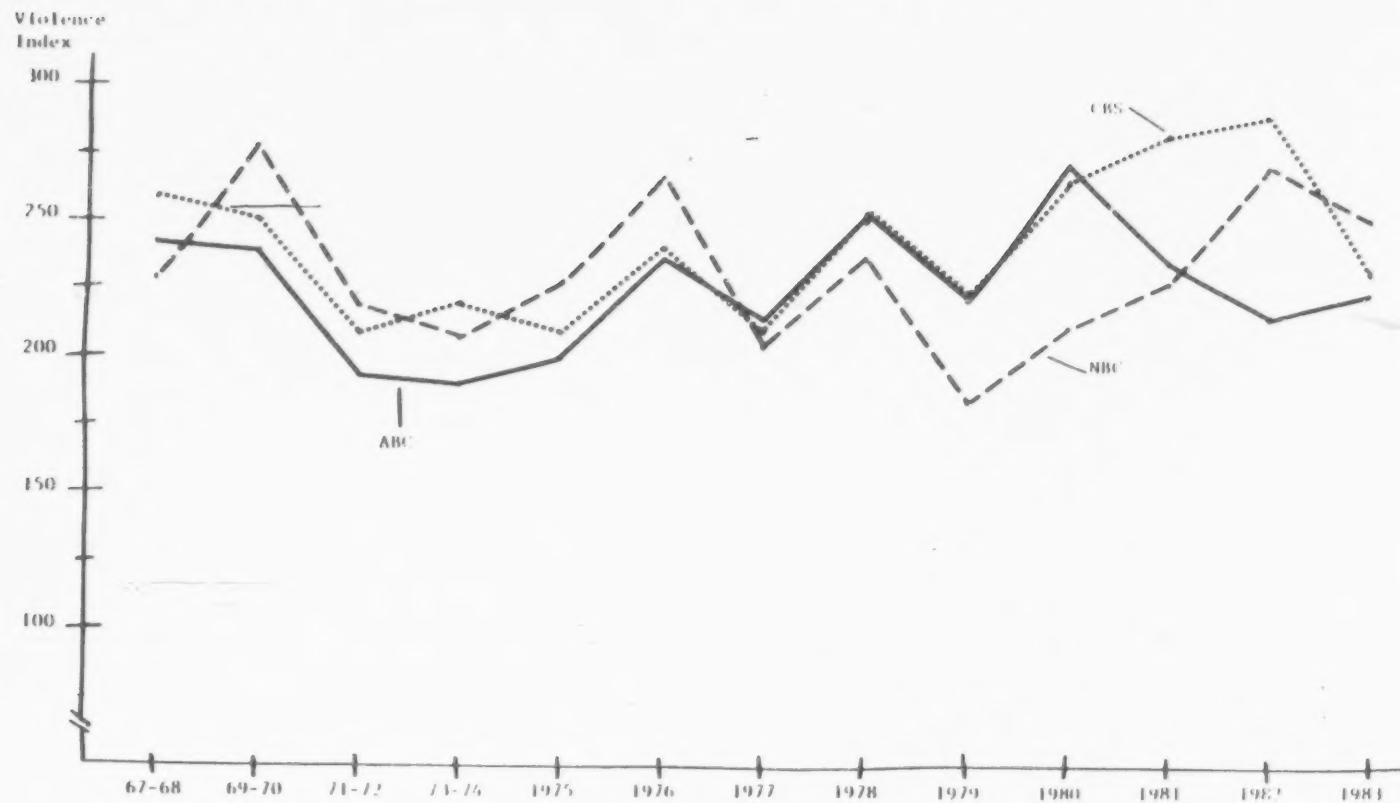


Figure 3: Violence Index in Weekend-Daytime (Children's) Programming by Network (1967-1981)

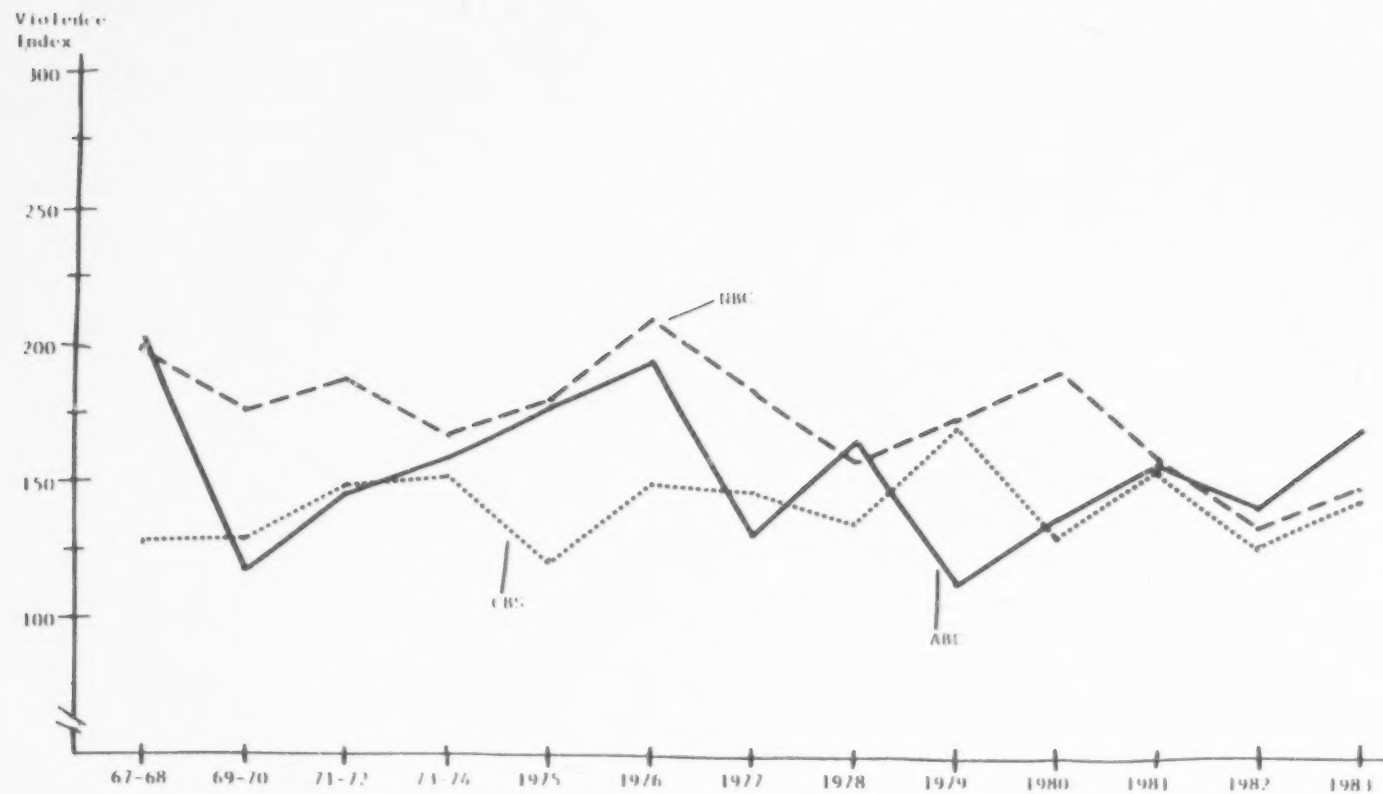


Figure 4: Violence Index in Prime-Time Programming by Network (1967-1981)

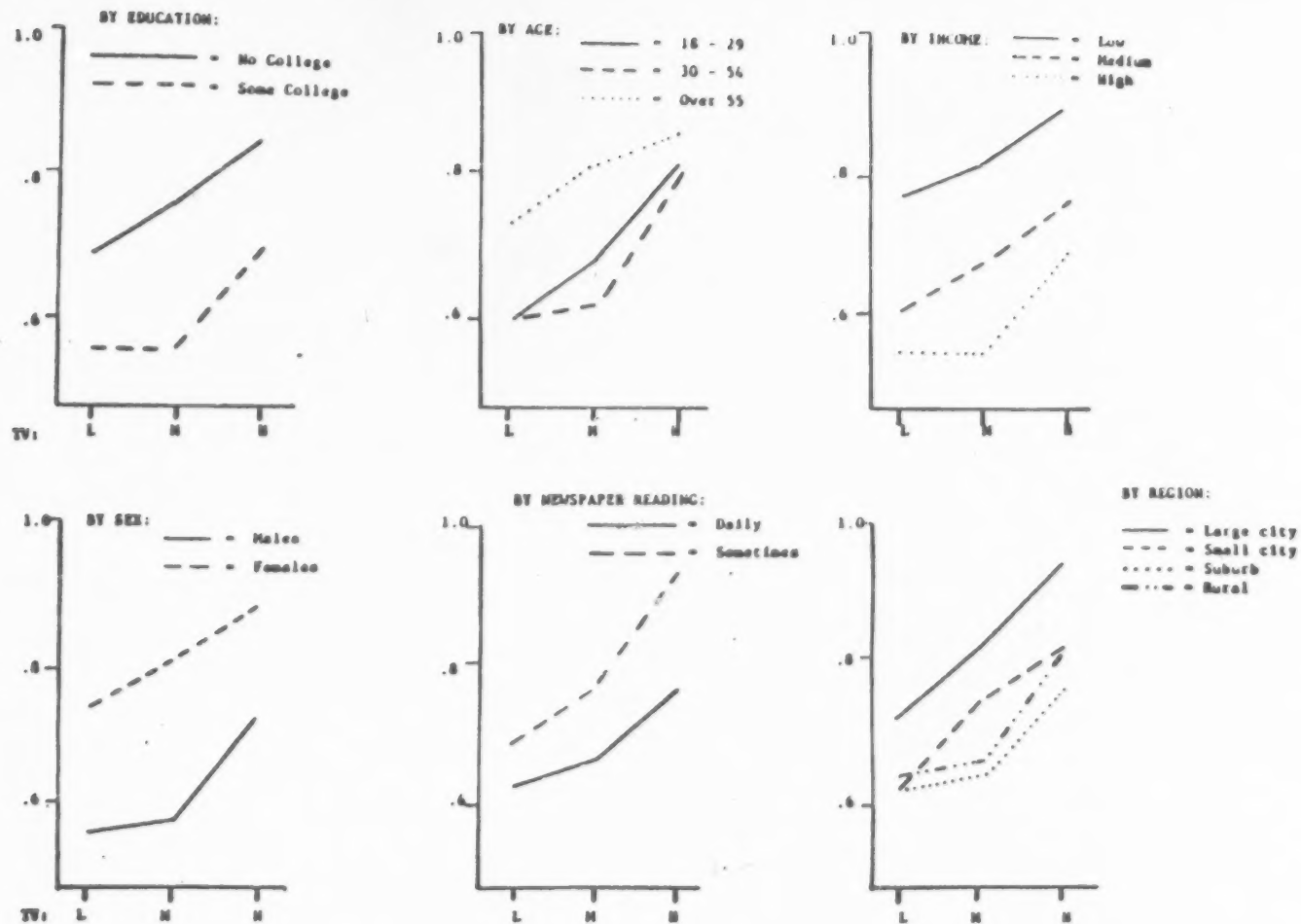
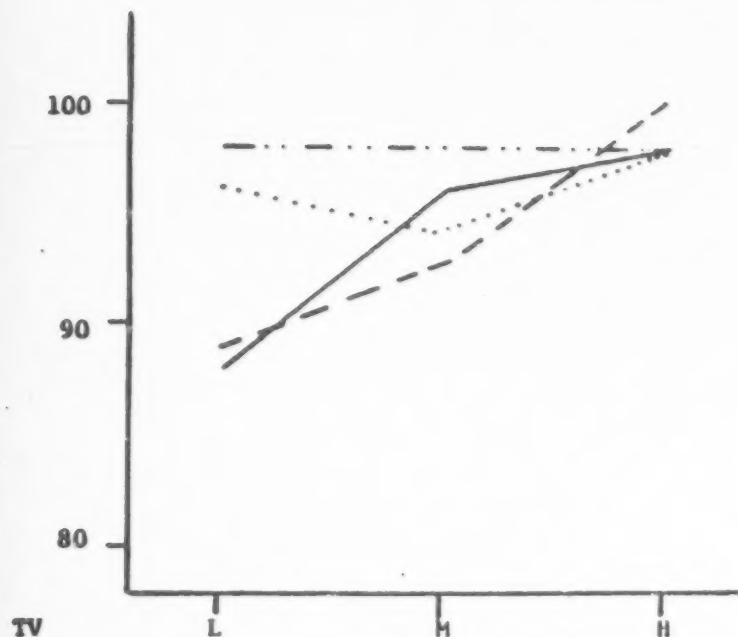


Figure 5

Relationship between Amount of Television Viewing and an Index of Images of Violence, within Major Demographic Subgroups

Percent who Agree that
"Crime is Rising"

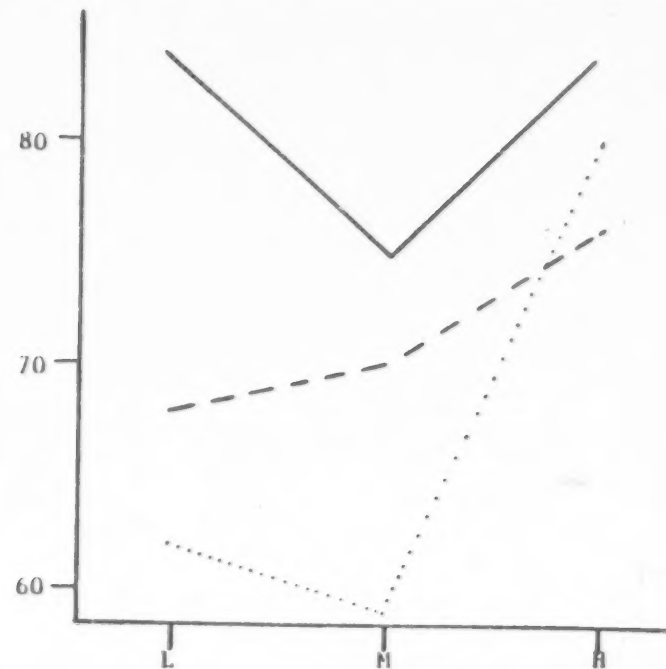


TV
VIEWING:

BY RESIDENCE:

- = Large Cities
- - - - = Small Cities
- = Suburbs
- = Non-Metropolitan

Percent Overestimating Chances of
Involvement in Violence



BY INCOME:

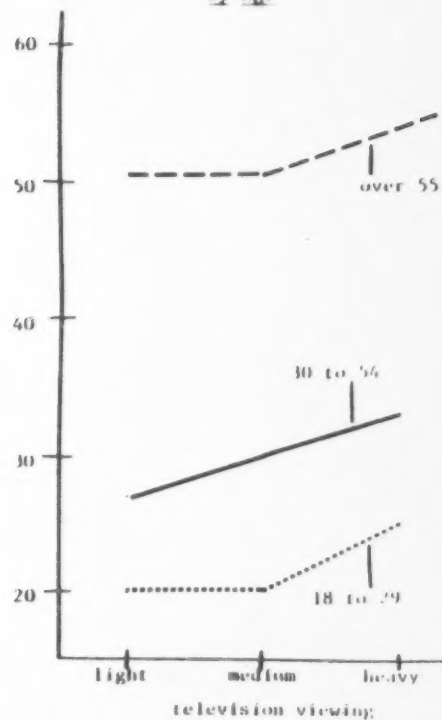
- = Low Income
- - - - = Medium Income
- = High Income

Figure 6

Examples of "Mainstreaming"

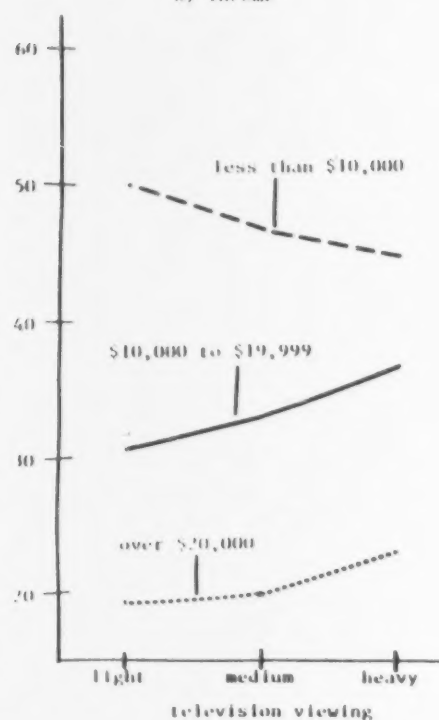
Percent who
score high on
Sexism Index

By Age



Percent who
score high on
Sexism Index

By Income



Percent who
score high on
Sexism Index

By Political Orientation

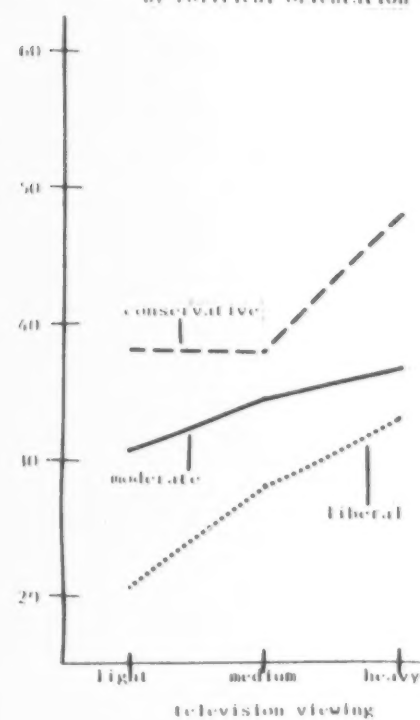
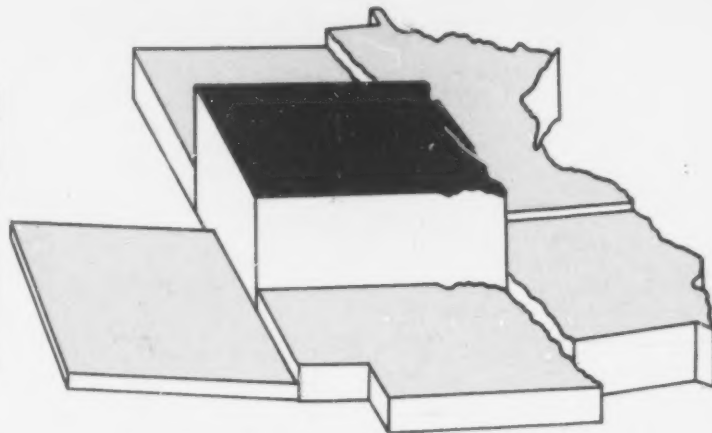


Figure 7: Television Viewing and Scores on Sexism Index by Age, Income and Political Orientation

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General Indicators	Latest Quarter	SOUTH DAKOTA			UNITED STATES		
		Latest Quarter	Year Ago	Percent Change	Latest Quarter	Year Ago	Percent Change
Personal Income (\$ Mil.)	1984-2	7,564	6,710	12.7	2,970,903	2,704,870	9.8
Farm Prop. Income (\$ Mil.)	1984-2	523	319	63.9	22,663	9,436	140.2
Non-ag Employment (Thous.)	1984-3	241	237	1.7	94,542	90,403	4.6
Unemployment Rate (%)	1984-3	3.6	4.5	-20.0	7.3	9.1	-19.8
Total Employment (Thous.)	1984-3	335	330	1.5	106,657	102,935	3.6

Note: All U.S. data seasonally adjusted except for the unemployment rate and total employment. For South Dakota data only personal income and farm proprietors' income are seasonally adjusted.

PERSONAL INCOME 1983

Boyden Kneen

About the author: Boyden Kneen, candidate for the M.B.A. degree at the School of Business, The University of South Dakota, is a graduate research assistant in the Business Research Bureau.

Introduction

This article presents recent income information obtained from the Bureau of Economic Analysis of the U.S. Department of Commerce. Its purpose is to compare various aspects of South Dakota's personal income with the Plains Region. In addition, the income data is separated into South Dakota counties and major sources of income. The sections on total personal income and major sources of personal income are based on data from August 1984, while the portion on county personal and per capita income is based on data from April 1984.

Definitions

To make the information more meaningful, a few terms need
(continued on page 4)

FINANCING PUBLIC EDUCATION IN SOUTH DAKOTA

(Continued from September 1984 Business Review)
Raymond J. Ring

About the author: Raymond J. Ring is Assistant Professor of Economics in the School of Business, The University of South Dakota. He wishes to acknowledge the very capable assistance of Karen Carey in working with the data and constructing the tables for this paper.

TEACHERS' SALARIES

In addition to levels and sources of funds, how those funds are used is also important. Teachers' salaries are especially important. First, since education is a "service industry," salaries account for most of its costs. In South Dakota, wages and salaries account for about 60% of local education expenditures and 50% of higher education spending.¹⁸

Second, teachers' salaries are important because they influence
(continued on page 7)

Jan Hanks, candidate for an M.A. degree in English and currently interning in the Business Research Bureau, assisted in editing the articles in the Business Review.

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Trend of Business

NATIONAL ECONOMY

The national economic recovery has taken the nation's plant and equipment capacity utilization from 69 percent to the current level of about 82 percent and reduced unemployment from nearly 11 percent to about 7.5 percent. Slow real growth to no real growth scenarios are being discussed by some economists for the final quarter of 1984 and into 1985. The slowing of GNP growth commonly accompanies the end of inventory accumulation as an economy cools from a vigorous recovery. Real GNP growth following a recovery usually performs at a rate of 0 to 2 percent for 1 to 3 quarters. All of the reported 1.9 percent increase in the third quarter GNP was attributed to inventory growth leaving the economy stalled. The index of leading economic indicators has been volatile in recent months. The index decreased in June and July, rose in August and September and fell again in October, giving a further indication of weakness in the nation's economic health. Real final sales for the fourth quarter 1984 are expected to increase about 4 percent with real GNP increasing in the neighborhood of 0 to 2 percent. The rate of inflation as measured by the CPI is currently around 5 percent which is lower than had been expected. Inflation is expected to inch upward in 1985 to a rate of 6.5 to 7 percent by this time next year. A decline in the real growth of GNP for one quarter in early 1985 is not being ruled out. Overall, the economy has moved from explosive growth to a period of adjustment as inventory acquisition adjusts from accumulation to that required to satisfy final demand.

SOUTH DAKOTA ECONOMY

South Dakota was one of six states experiencing a decline in personal income in the second quarter of 1984 compared to the first

quarter. These decreases were the result of a drop in farm income due to the phasing out of the payment-in-kind program. For this period, personal income in South Dakota declined 1 percent on a seasonally adjusted basis while farm proprietor's income fell 31.2 percent.

South Dakota's unemployment rate continued its downward trend reaching a third quarter 1984 low of 4.1 percent on a seasonally adjusted basis. It remains well below the United States third quarter 1984 figure of 7.3 percent.

Construction employment in South Dakota rose slightly (3.5%) the third quarter of 1984 compared to the previous quarter. Employment in the nonagricultural sector decreased 1.1 percent in the third quarter of 1984 compared to the second quarter but rose slightly compared to a year ago. According to the South Dakota Department of Labor, nonagricultural employment is expected to show some growth in 1985 with an estimated increase of 6.7 percent compared to 1982.

Sales of new cars and trucks increased slightly in the third quarter of 1984 compared to the previous quarter. On a seasonally adjusted basis new car sales rose 1.6 percent and sales of new trucks increased 2.2 percent.

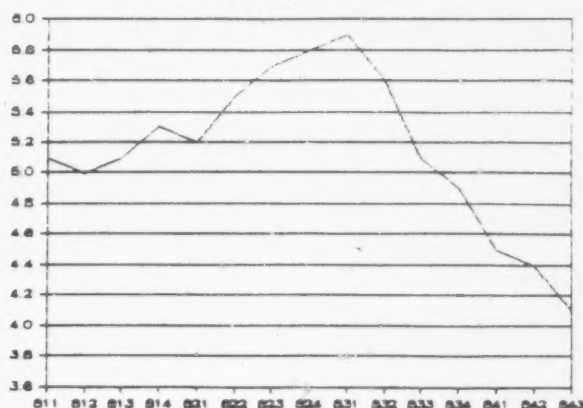
SOUTH DAKOTA BUSINESS INDICES
1983-1984 Quarterly
Seasonally Adjusted
(1972=100)

	1983				1984		
	1st	2nd	3rd	4th	1st	2nd	3rd
Personal Income	123.9	121.0	122.8	127.4	133.6	132.2	
Farm Proprietor's Income	50.8	29.8	33.0	46.8	68.7	47.3	
Non-Ag Employment	118.0	123.5	124.9	126.3	121.5	126.2	126.8
Unemployment Rate (%)	5.9	5.6	5.1	4.9	4.5	4.4	4.1
Construction Employment	91.5	93.1	99.2	102.5	100.9	95.6	98.9
New Cars	68.8	71.6	78.0	70.1	79.4	67.7	68.8
New Trucks	66.2	68.7	75.4	78.7	88.1	80.8	82.6

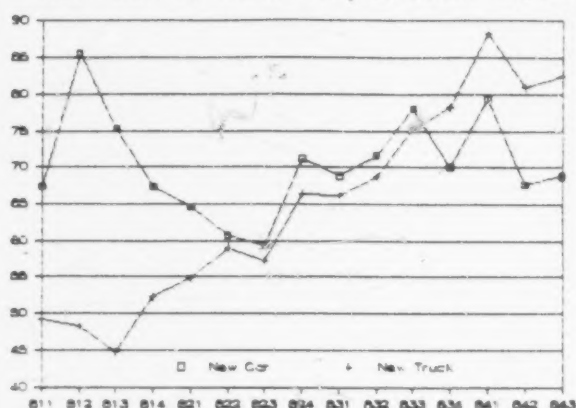
SOUTH DAKOTA BUSINESS & ECONOMIC INDICES

Quarterly Data 1981-1984
Adjusted for Seasonal Variation

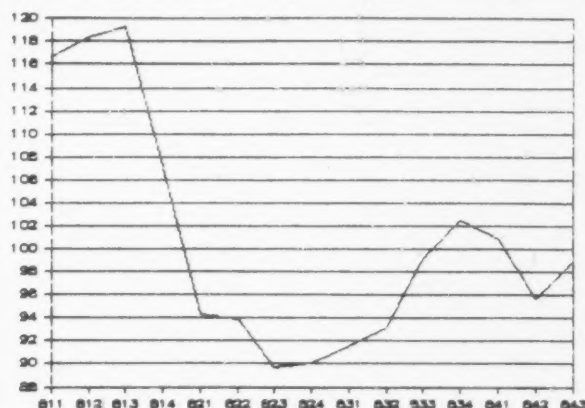
Unemployment Rate



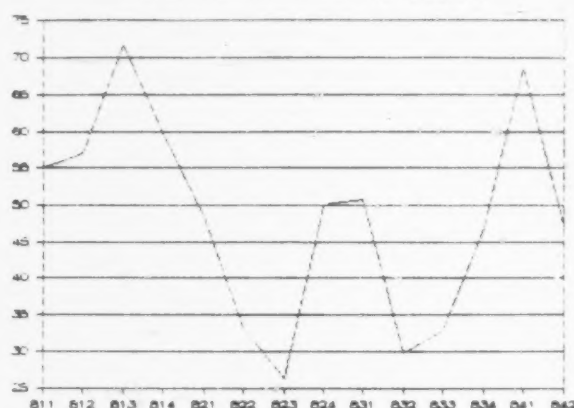
New Car & Truck Registration Index



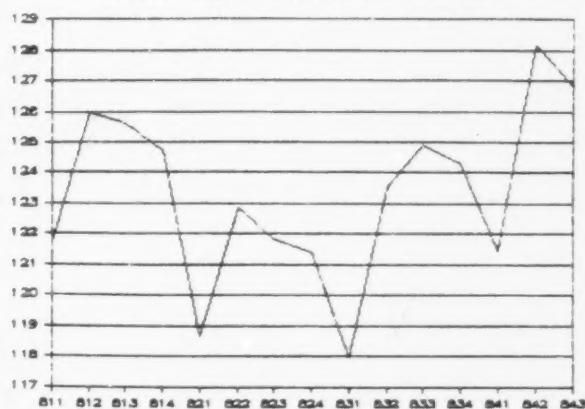
Construction Employment Index



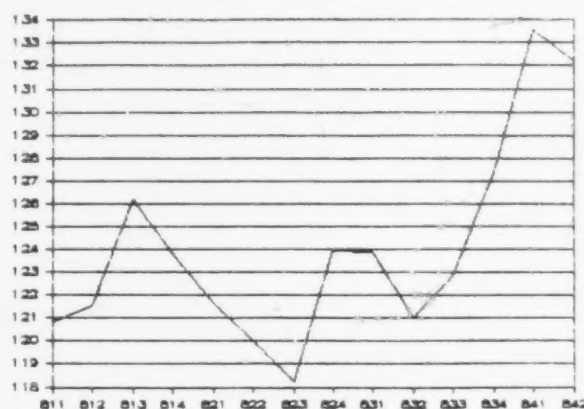
Real Farm Income Index



Non-Ag Employment Index



Real Personal Income Index



defining. The Plains States are a group of states defined by the Census Bureau as the West North Central Region. This region includes Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. Personal income is defined as all income received less personal contributions for social insurance. Income can be from private or government wage and salary disbursements, farm or nonfarm proprietors' income, personal dividend income, personal interest income, personal royalties, transfer payments, or other labor income. Some major components of personal income are defined as follows:

1) Wage and salary disbursements are comprised of wages and salaries including executives' compensation, commissions, tips and bonuses, and the value of payments in kind which represent income to the recipient.

2) Proprietors' income measures the net business earning of owners of unincorporated enterprises, consisting almost entirely of sole proprietorships and partnerships, but it also includes producers' cooperatives and other numerically minor forms of noncorporate business.

3) Transfer payments consist of receipts by persons from government and business (other than government interest) for which no services are currently rendered.

4) Other labor income includes employers' contributions to private pensions, health and welfare, and group insurance plans, compensation for injuries, pay for military reservists, directors' fees, and several minor items.

The reader is advised that in some tables individual values may not sum to the reported total due to rounding. Also, the figures currently reported may vary from those of earlier articles because of updates in the information.

Total Personal Income

Table I shows total personal income for the Plains Region which includes South Dakota. In 1983 total personal income in South Dakota was 6,891 million dollars. This was a 6.3 percent increase over 1982. Total personal income in the Plains Region had a 4.7 percent increase over 1982. During the same period the United States had an increase in total personal income of 6.1 percent.

TABLE I
Total Personal Income By State in Plains Region
1974-1983
(Millions of Dollars)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
IOWA	15,844	17,151	18,290	20,515	21,053	25,301	26,072	30,699	30,000	31,092
KANSAS	12,865	13,812	15,156	16,551	18,449	21,415	23,192	26,630	26,511	29,703
MINNESOTA	23,512	25,116	26,115	28,562	31,110	35,910	38,491	44,103	46,639	49,171
MISSOURI	24,137	26,115	28,667	31,951	35,503	40,099	43,109	49,495	51,000	54,920
NEBRASKA	6,278	6,511	6,610	10,000	11,110	13,253	13,901	16,543	17,300	17,900
NORTH DAKOTA	5,806	5,551	5,829	5,782	6,190	5,220	5,652	7,116	7,299	7,935
SOUTH DAKOTA	3,756	3,489	3,583	4,021	4,367	5,199	5,399	6,238	6,483	6,891
PLAINS REGION	89,769	97,064	103,601	115,091	122,037	146,675	158,175	179,813	180,182	192,425
UNITED STATES	1,162,203	1,240,487	1,309,201	1,454,006	1,520,185	1,762,650	1,876,711	2,220,039	2,315,031	2,434,422

SOURCE: BUREAU OF ECONOMIC ANALYSIS, U.S. DEPARTMENT OF COMMERCE.

TABLE II
Per Capita Personal Income By Plains States
1974-1983
(Dollars)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
IOWA	5,729	6,100	6,302	6,973	7,087	8,495	8,726	10,323	10,000	10,350
KANSAS	5,415	5,762	6,090	7,149	7,994	9,207	9,680	11,130	11,200	12,347
MINNESOTA	5,554	5,878	6,322	7,177	7,935	9,900	9,473	10,729	11,290	11,913
MISSOURI	5,048	5,447	5,944	6,994	7,509	9,291	9,812	10,819	10,903	10,969
NEBRASKA	5,105	5,180	5,219	6,747	7,566	8,672	8,995	10,455	10,686	11,212
NORTH DAKOTA	4,128	4,157	5,014	6,135	7,170	6,017	6,642	10,766	10,866	11,606
SOUTH DAKOTA	4,937	5,119	5,100	5,837	6,300	7,487	7,886	9,819	9,232	9,847
PLAINS REGION	5,196	5,597	5,944	6,817	7,466	9,194	9,401	10,815	11,132	11,732
UNITED STATES	5,448	5,882	6,367	6,904	7,722	9,651	9,696	10,944	11,115	11,680

SOURCE: BUREAU OF ECONOMIC ANALYSIS, U.S. DEPARTMENT OF COMMERCE.

Table II identifies total personal income on a per capita basis for the past ten years by state for the region. In 1983 per capita income in

South Dakota was 87 percent of the Plains States' average and 84 percent of the national average.

Table III shows the percentage changes in total and per capita personal income between 1974 and 1983 and between 1982 and 1983. Between 1974 and 1983 South Dakota's total personal income increased by 105.3 percent and its per capita income rose 99.5 percent. For this same period personal income for the Plains Region increased 119.5 percent compared to a U.S. gain of 135.3 percent. For the 10 year period per capita income rose 110 percent in the Plains Region and 114.5 percent in the United States.

TABLE III
Percent Changes in Per Capita and Total Personal Income
Plains States

	% Change in Total Personal Income 1974/1983	% Change in Total Personal Income 1982/1983	% Change in Per Capita Income 1974/1983	% Change in Per Capita Income 1982/1983
IOWA	96.2	.6	93.8	.7
KANSAS	150.9	4.1	115.9	3.4
MINNESOTA	128.9	9.8	115.3	5.5
MISSOURI	125.7	6.1	117.3	5.4
NEBRASKA	116.3	3.5	108.5	3.0
NORTH DAKOTA	104.3	8.8	90.4	7.4
SOUTH DAKOTA	105.3	6.3	99.5	9.5
PLAINS REGION	119.5	4.7	110.0	4.2
UNITED STATES	135.3	6.1	114.5	5.1

SOURCE: TABLES I AND II.

Table IV presents total personal income in South Dakota in current and 1967 dollars. Further, the percentage changes from the previous year are shown. The deflated income or income in 1967 dollars is computed by dividing the current dollar income by the Consumer Price Index. Table IV indicates that total personal income grew 105 percent between 1974 and 1983 while total personal income in 1967 dollars grew only 2 percent in that same period.

TABLE IV
Total Personal Income in South Dakota
Current and 1967 Dollars
1967=100
1974-1983

	In Current Dollars*	% Change from Previous Year	In 1967 Dollars*	% Change from Previous Year
1974	3,356	-1.7	2,272	-11.4
1975	3,489	4.0	2,164	-4.8
1976	3,583	0.4	2,105	-5.0
1977	4,021	14.8	2,215	7.8
1978	4,567	13.6	2,307	5.5
1979	5,159	13.0	2,373	1.5
1980	5,380	4.3	2,179	-8.2
1981	6,238	16.0	2,290	5.1
1982	6,481	3.9	2,242	-2.1
1983	6,891	6.3	2,309	3.0

*In Millions

Table V shows total disposable personal income for the Plains States. Disposable personal income is defined as personal income less taxes. In 1983 South Dakota's total disposable personal income rose 8 percent over the 1982 amount, a 448 million dollar increase.

TABLE V
Total Disposable Personal Income By Plains States
1974-1983
(Millions of Dollars)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
IOWA	11,414	12,917	13,586	17,202	18,591	21,395	22,520	25,907	26,078	26,900
KANSAS	11,018	12,014	13,054	14,237	15,995	18,195	19,804	22,315	23,014	25,067
MINNESOTA	18,117	19,510	21,058	24,046	26,413	29,475	32,066	36,610	38,115	41,203
MISSOURI	20,125	22,110	24,669	27,410	30,195	34,195	36,867	41,087	43,101	46,302
NEBRASKA	7,122	6,162	6,153	8,427	10,281	11,281	11,820	14,205	14,536	15,185
NORTH DAKOTA	1,821	1,457	1,544	1,884	2,177	2,567	2,680	4,059	4,405	7,070
SOUTH DAKOTA	3,066	3,190	3,110	3,438	4,400	4,638	4,772	5,080	5,710	6,143
PLAINS REGION	70,707	81,957	87,192	108,942	119,942	139,942	153,534	175,606	180,425	187,786
UNITED STATES	95,014	107,000	117,000	147,219	160,515	184,515	192,015	225,298	237,880	250,993

SOURCE: BUREAU OF ECONOMIC ANALYSIS, U.S. DEPARTMENT OF COMMERCE.

Table VI presents per capita disposable personal income. In 1983, per capita disposable personal income in South Dakota was 577 dollars more than in 1982. The Plains States average rose 473 dollars and the United States average increased 588 dollars.

TABLE VI
Per Capita Disposable Personal Income by Plains States
(Dollars)
1974-1983

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
PLAINS	4,490	5,181	5,357	5,503	5,712	5,932	6,155	6,494	6,974	7,562
MINNESOTA	4,485	5,272	5,479	5,614	5,857	6,037	6,345	6,747	7,216	7,736
MISSOURI	4,451	5,472	5,520	5,692	5,845	5,991	6,050	6,305	6,540	6,862
NEBRASKA	4,511	5,736	5,749	5,865	6,019	6,174	6,400	6,711	6,722	7,105
NORTH DAKOTA	4,511	5,295	5,743	5,743	6,455	7,184	7,520	8,074	8,167	9,507
SOUTH DAKOTA	5,191	5,414	5,180	5,567	6,020	7,003	7,662	8,167	8,534	10,100
PLAINS REGION	4,422	5,430	5,534	5,704	5,940	6,137	6,419	6,631	6,929	7,406
UNITED STATES	4,417	5,014	5,204	5,337	5,515	5,682	5,741	6,140	6,435	7,000
UNITED STATES	4,455	5,063	5,248	5,397	5,611	5,744	6,016	6,459	6,714	7,262

SOURCE: BUREAU OF ECONOMIC ANALYSIS, U.S. DEPARTMENT OF COMMERCE.

In Table VII, per capita disposable personal income is presented as a percentage of per capita personal income. Note that for the ten year period 1974-1983, South Dakota had the highest average percentage of any of the Plains States, 89.4 percent, compared to 85.1 percent for both the Region and the United States. This is a reflection of the low tax rates on income in South Dakota.

TABLE VII
Per Capita Disposable Personal Income as a Percentage of Per Capita Personal Income
Plains States
1974-1983

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	Average	Range
PLAINS	86.1	87.1	86.1	85.8	85.1	84.7	85.0	85.1	84.4	85.3	85.3	5
MINNESOTA	86.1	88.6	89.4	88.2	85.7	85.1	85.1	85.1	83.5	85.6	85.6	7
MISSOURI	85.8	86.9	86.1	85.9	85.4	85.1	85.1	84.4	83.8	84.9	85.1	4
NEBRASKA	86.1	87.7	86.7	87.1	87.1	84.8	84.8	84.8	84.8	85.5	85.5	3
NORTH DAKOTA	86.1	87.9	87.5	87.5	87.4	86.1	87.1	87.1	87.1	87.3	87.3	2
SOUTH DAKOTA	89.4	90.4	89.9	90.2	89.6	89.7	89.7	89.7	89.2	89.4	89.4	1
PLAINS REGION	85.6	86.5	85.7	85.4	85.2	84.7	84.8	84.1	84.1	84.8	85.1	
UNITED STATES	85.4	86.7	85.9	85.1	84.5	84.4	84.1	84.4	83.1	84.1	84.1	

SOURCE: COMPILED FROM TABLES VI AND XI.

Major Sources of Personal Income

Table VIII shows the major sources of total personal income in South Dakota for the years 1981, 1982, and 1983. Between 1981-1983, nonfarm total personal income increased 14 percent but farm total personal income fell 20 percent.

Personal income is derived as follows: Total earnings by place of work are added to adjustments for residence, income from dividend, income from interest, income from rent, and transfer payments. From this sum personal contributions for social insurance are subtracted to arrive at personal income.

Table VIII indicates that the railroad, farm, and construction industries were the only industries to show a decrease in total personal income from 1981 to 1983.

The industries which grew the most from 1981-1983 are: the finance, insurance, and real estate industry (24 percent), the service industry (21 percent), and the federal military (20 percent).

In Table IX the percentage distribution of personal income from industrial sources is shown. In 1983 the three largest sources of personal income in South Dakota were government and government enterprises (20.1 percent), services (18.5 percent), and farms (12.2 percent).

County Personal and Per Capita Income

Table X presents total personal income by county. The county with the largest total personal income in 1982 was Minnehaha. This data is the most recent because information on a county basis for 1983 is not yet available.

Table XI shows county per capita personal income. The county with the largest per capita income was Sul'y with a 1982 per capita income of 15,846 dollars.

The final table, Table XII, presents the percent changes in total

TABLE VIII
South Dakota Personal Income by Major Sources
(Millions of Dollars)

	1981	1982	1983
Total Personal Income By Place of Residence	6,238	6,481	6,891
Nonfarm	5,548	5,962	6,342
Farm	690	518	549
Derivation of Total Personal Income			
Total Earnings by Place of Work	4,226	4,170	4,487
Less: Personal Contributions for Social Insurance	252	266	285
Plus: Adjustment for Residence Dividends, Interest, Rent, Transfer Payments	2,265	2,577	2,689
Earnings by Place of Work			
Wages and Salaries	2,997	3,095	3,274
Other Labor Income	256	292	334
Proprietors Income	973	783	877
Farm	597	409	431
Nonfarm	376	374	446
Earnings by Industry			
Farm	690	518	549
Nonfarm	3,536	3,652	3,938
Private	2,732	2,800	3,037
Agriculture Services, Forestry			
Fisheries & Other	21	23	25
Mining	72	59	73
Construction	220	188	207
Manufacturing	454	460	500
Nondurables	235	242	254
Durables	219	218	246
Transportation & Pub. Utilities	317	331	350
Railroads	32	30	29
Trucking & Warehousing	116	117	124
Water Transportation	(L)	(L)	(L)
Other Transportation	20	23	24
Communication	79	83	87
Electric, Gas, & Sanitary Serv.	70	79	85
Wholesale Trade	321	322	328
Retail Trade	443	452	481
Finance, Insurance & Real Estate	194	210	241
Banking	78	85	89
Other Finance, Ins. & Real Estate	116	126	152
Services	690	752	832
Hotels & Other Lodging Places	22	21	24
Amusement & Recreation Inc. Movies	16	16	17
Private Households	17	18	18
Personal Services	36	39	43
Business & Repair	84	91	101
Health Services	303	346	386
Legal Services	45	53	62
Educational Services	33	36	37
Social Services	28	28	31
Membership Organizations	56	56	60
Miscellaneous Services	50	49	51
Government & Govt. Enterprises	804	852	901
Federal, Civilian	212	216	228
Federal, Military	109	121	131
State & Local	484	514	542

SOURCE: BUREAU OF ECONOMIC ANALYSIS, U.S. DEPARTMENT OF COMMERCE.

(L) Less than \$50,000.

Note: Summing individual items may not equal totals due to rounding.

personal income and per capita personal income from 1981 to 1982. McPherson county had the largest increase in both total personal income (25.0 percent), and per capita personal income (26.3 percent).

TABLE IX
Percentage Distribution of Total Personal Income
From Industrial Sources in South Dakota
1981, 1982, 1983

	1981	1982	1983
Total Labor & Proprietors' Income	4,226	4,170	4,487
Farm	690	518	549
Agricultural Services, Forestry, Fisheries & Other	21	23	25
Mining	72	59	73
Construction	220	188	207
Manufacturing	454	460	500
Transportation & Utilities	317	331	350
Wholesale Trade	321	322	328
Retail Trade	443	452	481
Finance, Insurance, & Real Estate	194	210	241
Services	690	752	832
Government & Govt. Enterprises	804	852	901

SOURCE: COMPILED FROM TABLE VIII.

Note: Summing individual items may not equal totals due to rounding.

TABLE X
County Total Personal Income
South Dakota Counties
(Millions of Dollars)

Populations by District									
1982 Rank									
SOUTH DAKOTA	1980	1981	1982	1982 Rank					
Aurora	23.8	25.0	29.0	52	Hyde	18.0	18.1	21.6	60
Beadle	171.3	189.4	196.7	6	Jackson	20.2	21.1	21.6	61
Bennett	19.4	21.2	23.2	59	Jerauld	20.1	21.7	24.4	56
Bon Homme	55.4	68.6	68.5	27	Jones	12.6	14.4	15.6	63
Brookings	174.6	207.7	215.6	4	Kingsbury	52.2	64.4	66.7	29
Brown	330.9	382.1	392.8	3	Lake	73.3	94.0	95.4	16
Brule	45.4	48.9	55.1	31	Lawrence	145.2	166.9	167.5	10
Buffalo	10.4	10.1	12.1	66	Lincoln	95.3	127.3	122.4	12
Butte	60.5	66.7	68.7	26	Lyman	29.4	33.9	36.9	47
Campbell	20.8	22.2	25.3	55	McCook	39.2	53.3	54.8	32
Charles Mix	60.8	77.7	79.5	22	McPherson	34.5	35.6	44.5	40
Clark	34.1	43.8	49.5	35	Marshall	40.2	48.0	51.1	33
Clay	93.2	115.3	113.9	13	Meade	149.7	168.3	179.1	8
Codington	166.5	191.0	203.9	5	Mellette	14.2	13.9	14.1	65
Corson	29.7	31.7	32.6	50	Miner	24.8	30.9	34.3	49
Custer	38.9	44.8	47.7	36	Minnehaha	1065.1	1198.5	1262.9	1
Davison	147.3	165.3	174.2	9	Moody	47.9	71.1	69.1	25
Day	57.7	67.2	74.2	23	Pennington	618.8	678.7	716.6	2
Deuel	31.2	45.7	47.3	38	Perkins	40.5	43.4	43.4	41
Dewey	36.1	37.9	39.5	44	Potter	37.3	40.3	43.4	42
Douglas	25.8	32.0	34.3	48	Roberts	70.8	85.5	91.4	18
Edmunds	37.7	40.0	47.4	37	Sanborn	22.1	25.6	27.9	54
Fall River	78.0	84.6	84.4	20	Shannon	34.4	36.7	37.7	46
Faulk	29.3	30.7	38.1	45	Spink	72.1	85.2	93.5	17
Grant	69.6	84.2	90.3	19	Stanley	21.0	22.4	23.6	58
Gregory	43.2	49.9	56.6	30	Sully	30.8	33.7	30.2	51
Haakon	26.3	28.1	28.0	53	Todd	35.7	38.1	41.7	43
Hamlin	31.8	45.0	46.2	59	Tripp	57.8	66.2	73.2	24
Hand	42.0	46.0	50.9	34	Turner	77.3	98.3	95.6	15
Hanson	17.3	24.0	24.0	57	Union	88.5	115.9	111.9	14
Harding	16.1	17.3	16.6	62	Walworth	59.2	63.8	68.3	28
Hughes	130.2	141.6	147.7	11	Yankton	157.6	180.8	184.1	7
Hutchinson	62.8	79.3	82.8	21	Ziebach	13.4	14.2	14.8	64

TABLE XI
County Per Capita Personal Income
South Dakota Counties
(Dollars)

(Dollars)									
SOUTH DAKOTA	1980	1981	1982	1982 Rank					
Aurora	5624	6861	8034	55	Hyde	8830	9047	10967	7
Beadle	8950	8898	10244	18	Jackson	5885	5427	6625	61
Bennett	6022	7018	7446	56	Jerauld	6887	7466	8481	49
Bon Homme	6896	8730	9657	44	Jones	8701	10115	10824	8
Brookings	7139	8402	8655	47	Kingsbury	7835	9624	10015	21
Brown	8976	10266	10492	10	Lake	6827	8746	8763	46
Brule	8718	9386	10340	14	Lawrence	7869	9080	8960	39
Buffalo	5747	5664	7079	59	Lincoln	6772	9212	8808	45
Butte	7218	7935	8212	54	Lyman	7617	8913	9852	24
Campbell	9315	10206	11397	4	McCook	6103	8502	8662	43
Charles Mix	6309	8054	8243	53	McPherson	8635	9022	11392	5
Clark	7022	9087	10277	15	Marshall	7511	8954	9619	31
Clay	7106	8413	8315	51	Meade	7226	8041	8509	48
Codington	7973	9021	9337	36	Mellette	6297	6174	6304	63
Corson	5776	5851	6153	64	Miner	6676	8296	9464	34
Custer	6409	7360	7590	58	Minnehaha	7685	10838	11206	6
Davison	8280	9260	9827	25	Moody	7160	10629	10135	20
Day	7123	8303	9228	37	Pennington	8876	9631	9813	26
Deuel	5900	8645	8934	40	Perkins	8643	9332	9404	35
Dewey	6698	7421	7421	57	Potter	10216	10711	11533	3
Douglas	6208	7843	8292	52	Roberts	6536	7828	8326	50
Edmunds	7377	7895	9577	32	Sanborn	6346	8049	8863	42
Fall River	9229	10418	10604	13	Shannon	3016	3150	3355	66
Faulk	8842	9677	11629	2	Spink	7875	9432	10270	16
Grant	7750	9428	9799	28	Stanley	8249	8880	9785	27
Gregory	7167	8288	9496	33	Sully	15527	17173	15846	1
Haakon	9348	10225	9999	22	Todd	4901	5223	5771	65
Hamlin	6053	8608	8880	41	Tripp	8005	9309	10416	12
Hand	8518	9390	10595	9	Turner	8326	10804	10476	11
Hanson	5093	6976	7034	60	Union	8066	10565	10256	17
Harding	9459	10425	9755	29	Walworth	8550	9326	9997	23
Hughes	9177	9862	10205	19	Yankton	8319	9523	9668	30
Hutchinson	8716	8557	9029	38	Ziebach	5775	6180	6418	62

TABLE XII
Percent Change in Total Personal Income
and Per Capita Personal Income
South Dakota Counties
1981/1982

SOUTH DAKOTA		SOUTH DAKOTA COUNTIES			
	% Change Total Income	% Change Per Capita Income	1981/1982		
Aurora	16.0	17.8	Hyde	19.3	21.2
Beadle	3.9	3.5	Jackson	2.4	3.1
Bennett	9.4	6.1	Jerauld	12.4	13.6
Bon Homme	-0.1	1.5	Jones	8.3	7.0
Brookings	3.8	3.0	Kingsbury	3.6	4.1
Brown	2.8	2.2	Lake	1.5	0.2
Brule	12.7	10.2	Lawrence	0.4	-1.3
Buffalo	19.8	25.0	Lincoln	-3.8	-4.4
Butte	3.0	3.5	Lyman	8.8	10.5
Campbell	14.0	11.7	McCook	2.8	1.9
Charles Mix	2.3	2.3	McPherson	25.0	26.3
Clark	13.0	13.1	Marshall	6.5	7.4
Clay	-1.2	-1.2	Meade	6.4	5.8
Codington	6.8	3.5	Mellette	1.4	2.1
Corson	2.8	5.2	Miner	11.0	14.1
Custer	6.3	3.1	Minnehaha	5.4	3.4
Davison	5.4	6.1	Moody	-2.8	-4.6
Day	10.4	11.1	Pennington	5.6	1.9
Deuel	3.5	3.3	Perkins	0.0	0.8
Dewey	4.2	5.3	Potter	7.7	7.7
Douglas	7.2	5.7	Roberts	6.9	6.4
Edmunds	18.5	21.3	Sanborn	9.0	10.1
Fall River	-0.2	2.8	Shannon	2.7	1.1
Faulk	24.1	25.4	Spink	9.7	6.5
Grant	7.2	3.9	Stanley	5.4	10.2
Gregory	13.4	14.6	Sully	-10.4	-7.7
Haakon	-0.4	-2.2	Todd	9.4	10.5
Hamlin	2.7	3.2	Tripp	10.6	11.9
Hand	10.7	12.8	Turner	-2.7	-3.0
Hanson	0.0	0.8	Union	-3.5	-2.9
Harding	-4.0	-5.5	Walworth	7.1	7.2
Hughes	4.3	3.7	Yankton	1.8	1.5
Hutchinson	4.4	5.5	Ziebach	4.2	3.9

SOURCE: BUREAU OF ECONOMIC ANALYSIS, U.S. DEPARTMENT OF COMMERCE.

Summary

An attempt to show different aspects of South Dakota's income and how it compares to other Plains States and the nation is the focus in this article. Based on personal income and excluding the farming industry, the state is enjoying a period of growth and economic stability. The State's business future appears very positive as more and more businesses find South Dakota's business climate to be a good place in which to do business.

(Financing Public Education in South Dakota continued from page 1.)

what type of person is attracted to, and remains in, the profession. Thus salaries influence the quality of instruction provided to South Dakota children. A recent report by the RAND Corporation suggested that:

Unless the status, salaries, and training of school teachers are improved, the least academically qualified college students will become "the tenured teaching force for the next two generations of American school children,"...

...until teaching becomes "a more attractive career alternative, the problems of attracting and retaining talented teachers will undermine the success of reforms intended to upgrade educational programs and curricula."¹⁹

Salaries also affect the ability to attract teachers from other states, an important element in providing the diversity and wider perspective so important to education. Teachers from outside South Dakota are probably not better educators, but they do introduce new and different viewpoints for their students' consideration.

Elementary and secondary

Table 9 contains data for average elementary and secondary teachers' salaries in South Dakota for selected years, in both nominal and real terms.²⁰ While teachers' salaries have continually increased in current dollar terms, their purchasing power has remained roughly constant. During the same time period real per capita personal income in South Dakota increased 39% (an average increase of about 2.4% per year). Thus, while teachers' living standards stayed the same, their neighbors, on average, were becoming better off.

Table 10 compares average teacher salaries paid in South Dakota with average teacher salaries in surrounding states and in the United States as a whole. This table shows that South Dakota elementary and secondary teachers in 1983-84 received less than the average for their counterparts across the nation. In fact, they ranked last among the 50 states in 1983-84, down from 46th in each of the previous three years. Salary differences between South Dakota and surrounding states range from \$2,305 (12%) below Nebraska to \$8,717 (35%) below Wyoming.

For interstate comparisons to be more accurate, other differences among states should be factored in whenever possible. Some people feel the cost of living is lower in South Dakota. Unfortunately, this assertion cannot be tested, because there are no adequate cost of living data that allow price comparisons among states.

One advantage enjoyed by South Dakotans over residents of most other states is lower tax burdens. Precise comparisons are not possible, because actual tax burdens vary, depending not only on family incomes but also on number and age of dependents, type of house, consumption patterns, and a myriad of other factors. In spite of this lack of precision, a rough comparison is possible using average

Table 9
Average Salaries of South Dakota
Elementary and Secondary Teachers
Nominal and Real
1969-70 through 1983-84

	Nominal	Real ¹
1969-70	\$6,403	\$15,381
1970-71	7,392	17,006
1971-72	7,628	16,879
1972-73	7,860	16,703
1973-74	8,109	15,939
1974-75	8,708	15,607
1975-76	9,408	15,904
1976-77	10,183	16,350
1977-78	10,850	16,420
1978-79	11,419	15,975
1979-80	12,348	15,745
1980-81	13,668	15,894
1981-82	14,717	15,989
1982-83	15,595	16,175
1983-84	16,480	16,480

¹1983-84 purchasing power. Deflated with GNP deflator for personal consumption expenditures.

Sources: Salaries: National Education Association, Research Department, Estimates of School Statistics data file.
Price Index: U.S. Department of Commerce, Bureau of Economic Analysis.

tax burdens. Table 10 also shows estimated per capita tax burdens in 1983-1984. If we assume an average of four members per family, then the average teacher will pay state and local taxes equal to four times the figure in that column.²¹ Subtracting this figure (i.e., four times per capita taxes) from average teachers' salaries gives a measure of tax-adjusted teachers' salaries, shown in the last column of Table 10. As these data show, adjusting for taxes narrows the gap between South Dakota teachers and those in surrounding states, but does not eliminate it. After adjustment for taxes, the narrowest gap, between North Dakota and South Dakota, is about \$800 (5%); the widest gap, between South Dakota and Minnesota, is approximately \$4,850 (25%).

These gaps would probably be wider if another refinement were introduced. All states' taxes are to some extent exported, that is, paid

Table 10
Average Salaries of
Elementary and Secondary Teachers in
South Dakota and Surrounding States¹
1963-84 Purchasing Power
Selected Years

	1969-70	1974-75	1979-80	1983-84	Taxes per capita	Tax-adjusted salaries ²
US	\$20,742	\$20,951	\$20,264	\$22,029	\$828	\$18,717
SD	15,281	15,807	15,745	16,480	486	14,536
IA	20,070	19,096	19,385	20,140	819	16,864
IN	20,798	21,151	20,389	24,400	1254	19,384
MT	18,271	17,712	17,682	20,690	680	17,970
NE	17,716	16,803	17,234	18,785	656	16,161
ND	16,085	16,559	16,911	17,261	781	15,227
WI	19,775	18,491	20,416	25,197	1464	19,141

¹Tax-adjusted salaries = 1983-84 salaries - (taxes per capita x 4). See text for further explanation.

Sources: Salaries: same as Table 9.
Taxes per Capita: Estimated by the author from partial data in U.S. Department of Commerce, Bureau of the Census, Quarterly Summary of Federal, State, and Local Tax Revenue G83, Nos. 3 and 4: G84, No. 1 (February, April, and August 1984).

by persons living outside the taxing state. Tax exporting is particularly high with income and severance taxes, neither of which is used very much in South Dakota. Thus, South Dakota's rate of tax exporting is lower than that of other states. The actual tax burden borne by state residents, if adjusted for exporting, would be lowered more for surrounding states than for South Dakota. With this refinement, the tax-adjusted difference between South Dakota teachers' salaries and those of teachers in surrounding states would be somewhat higher. Probably the most significant change would be for Wyoming.²²

Higher education

Table 11 shows average salaries of faculty in South Dakota public institutions of higher education in the school years 1978-79 through 1984-85. For the period shown, faculty salaries rose considerably in dollars, but rose only very slightly (about 0.5% per year) after adjustment for inflation. South Dakota per capita personal income rose at about the same rate during the same time period.

Table 11
Average Faculty Salaries, South Dakota
Regents' Institutions of Higher Education
1978-79 through 1984-85

	Nominal	Real ¹
1978-79	\$17,149	\$23,991
1979-80	18,575	23,684
1980-81	20,374	23,692
1981-82	23,566	25,603
1982-83	24,526	25,439
1983-84	25,014	25,014
1984-85	26,100	24,745 ²

¹1983-84 prices. Deflated with GNP deflator for personal consumption expenditures.

²Based on Citibank Forecasting Service forecast of price index.

Sources: **Salaries:** South Dakota Board of Regents.
Price index: same as Table 9.

South Dakota faculty salaries are compared with those of the nation and of surrounding states in Table 12. These data show that South Dakota faculty with 9-month contracts earned about 81% of what was earned by 9-month faculty across the nation. According to this measure, South Dakota ranked 49th in 1982-83; only Mississippi paid lower salaries in that year. The gap between South Dakota faculty and their counter-parts in surrounding states ranges from \$1,935 (8%) below Nebraska to \$6,835 (23%) below Wyoming. After the rough adjustment for tax differences (explained in the preceding section), the gap is narrower, ranging from about \$1,050 (5%) below North Dakota to about \$3,000 (13%) below Montana. Iowa, Minnesota, and Wyoming also pay nearly \$3,000 higher average salaries after adjustment for taxes.

Faculty on 12-month contracts fared slightly better in South Dakota: 91% below the national average for professors on like contracts across the country, and a national ranking of 44th. In the region, professors on 12-month contracts ranked sixth, with only Nebraskans doing more poorly.²³

The author was unable to locate exactly comparable data for the nation and surrounding states in earlier years. One report with nearly comparable data for faculty members with 9-month average contracts

in 1978-79 shows South Dakota roughly 80% below the national average and ranking either 49th or 50th. This report also shows the state to have had relatively high increases between 1977-78 and 1978-79, so 1977-78 salaries must have been even less than 80% of the national average and ranked 50th.²⁴

Table 12
Average Salaries, Full-Time Faculty, 9-Month Contracts
Public Institutions of Higher Education,
South Dakota and Surrounding States
1982-1983

	Salaries	Tax-adjusted Salaries ¹
US	\$27,507	\$24,195
SD	22,310	20,366
IA	26,341	23,065
MN	28,154	23,138
NE	26,066	23,346
NE	24,245	21,621
NE	25,361	21,437
WY	29,145	23,289

¹Based on same data as used in Table 10.

Source: Salaries: National Education Association tabulations from U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey.

Table 13 allows comparisons between teachers' and professors' salaries and those paid in other occupations.²⁵ These data include all earnings, so for teachers they may include more than just salaries from instruction. (Other salary data in this paper include only income from teaching). They show that teachers earn (even when secondary employment, if any, is included) considerably less than South Dakotans in most other occupations that require a college degree, and less than many jobs that require no education beyond high school. Teachers' earnings pale in comparison to those of persons in other professions. Some other professions require graduate education. While initial teacher certification does not require a graduate degree, teachers without graduate degrees must periodically earn additional college credit to retain certification.

Table 13
Median Earnings of Persons in Selected Occupations
South Dakota
1979

	Worked Year Round Full Time in 1979	
	Male	Female
All experienced labor force	\$13,268	\$ 8,150
Executive, administrative, and managerial	18,016	10,235
Officials and administra- tors, public admin.	16,594	11,076
Administrators, education and related fields	18,707	10,488
Engineers, architects, and surveyors	20,453	9,778
Mathematical and computer scientists	18,351	15,267
Physicians	47,132	30,071
Dentists	39,384	9,667
Registered nurses	13,743	12,265
Pharmacists	18,195	12,662
Teachers, postsecondary	20,454	13,735
Teachers, elementary and prekindergarten	13,578	11,055
Teachers, secondary	14,145	10,917
Social scientists and urban planners	19,817	16,874
Lawyers and judges	30,470	14,205
Technicians and related support occupations	14,288	9,615
Sales occupations	15,732	7,056
Administrative support, including clerical	15,760	8,360
Service occupations	10,626	6,564
Farm operators and managers	7,941	3,294
Mechanics and repairers	12,832	9,269
Construction	13,819	8,935
Extractive	17,777	11,778
Precision production	15,834	7,611

Source: U.S. Department of Commerce, Bureau of the Census, Detailed Population Characteristics, South Dakota, PC80-1-D43 (Washington, D.C.: U.S. Government Printing Office, November 1983): Table 222.

Summary and Conclusions

By most measures considered in this paper, spending for education in South Dakota increased from 1962-63 until the early 1970s, then generally declined (although there were short periods of increase). This general pattern (increases for about 10 years, then decreases to the present) was experienced by all components of education: elementary and secondary, higher, and other. The net effect is that inflation-adjusted spending per capita is now higher than it was in 1962-63, and spending per \$1,000 personal income is about the same as it was 20 years ago (If the declines continued after 1981-82, spending relative to personal income is now lower than it was in 1962-63).

The one major exception to this overall pattern is in local school spending per student, which grew almost without interruption until 1979-80, then declined for the next two years. As a result, the 1981-82 figure is 39% above its 1962-63 level. By contrast, spending per student in higher education rose between 1962-63 and 1972-73 but fell after that. In 1981-82 it was 26% lower than in 1962-63.

South Dakota spending for education has fallen relative to other states in the nation and to states touching South Dakota. In the 1960s the state was above the national average in per capita spending and far above the national average in spending relative to personal income. During the 1970s and early 1980s, both measures dropped considerably with respect to the rest of the nation. Per capita spending is now below the national average, but spending per \$1,000 personal income remains about 9% above. Among surrounding states, South Dakota has been in the bottom half in per capita spending throughout the last two decades. In spending relative to personal income, the state fell from tied for first among contingent states to tied for last.

Elementary and secondary teachers' salaries remained roughly constant through the 1970s and early 1980s. They were below those of all surrounding states and of almost all other states during the 1970s and early 1980s, even after adjustment for taxes. Salaries of college and university faculty were also at or near the bottom of the national rankings. In the years for which most recent data are available, South Dakota ranked last in salaries paid in elementary and secondary education, next to last in higher education.

This declining support—at least in financial terms—could have serious consequences if young people in South Dakota are—or soon will be—earning less. Poorly educated, poorly informed citizens are less likely to vote, less willing to shoulder their share of civic responsibilities, and more likely to make ill-advised decisions when they do vote or participate in government.

Quality of education can also affect South Dakotans' quality of life. Education levels (as well as other factors) positively affect lifetime earnings and negatively affect unemployment, so material well-being depends on education. Quality education also contributes to appreciation and enjoyment of the nonmaterial and nonfinancial aspects of life, such as literature, art, and many other facets of culture and cultural values.

Level and quality of education also influences economic development. Almost every study of factors affecting business location has found size and quality of labor force to be a primary factor²⁶ and education certainly contributes to labor quality. Quality of life (of which education is a part) also appears to be important in location decisions.

Increases in government financial support of education would probably require higher taxes, at least in the short run. That would certainly influence taxpayers' financial condition. It may also influence business location, although most studies find state and local taxes to be of less significance than labor force characteristics.²⁷ The

question of financial support of education is, like most economic matters, one of trade-offs. Do South Dakotans wish to continue to fund education at low levels vis-a-vis most of the rest of the nation (whether lower funding is "underfunding" is left to the reader—and all South Dakotans—to decide) and continue to pay relatively low taxes? Or do they wish to raise their financial support for education, recognizing that to do so probably means lower disposable incomes—at least initially? Citizens throughout the nation are addressing similar questions in studies, committees, campaign debates, and other formats. Different states and localities will make different choices—but choices must be made.

FOOTNOTES

¹⁸U.S. Department of Commerce, Bureau of the Census, *Governmental Finances*, 1979, 1980, 1981 (Washington, D.C.: U.S. Government Printing Office).

¹⁹Paul Desruisseaux, "Improve the Status, Salaries, and Training of Schoolteachers, RAND Urges," *Chronicle of Higher Education*, August 10, 1984, p. 4, citing Linda Darling-Hammond, "Beyond the Commission Reports: The Coming Crisis in Teaching," No. R-3177-RC (Santa Monica, Cal.: The RAND Corporation, 1984).

²⁰Teachers' salaries have been adjusted with the GNP deflator for personal consumption expenditures so that real salaries reflect teachers' purchasing power, whereas the deflator for state and local government purchases of goods and services was used for government spending to reflect governments' costs. The personal consumption expenditures deflator was used instead of the consumer price index, because the former takes account of changes in consumers' buying patterns, whereas the latter is based on a constant "market basket".

²¹This assumption probably overstates the adjustment, since there were on average only 3.0 persons per South Dakota family in 1980. Average family size in surrounding states is between 3.0 and 4.0, except in North Dakota where it is 5.0. U.S. Department of Commerce, Bureau of the Census, *1980 Census, General Social and Economic Characteristics: [state]* (Washington, D.C.: U.S. Government Printing Office, 1983) Table 132.

²²See Raymond Ring, "Tax Exporting and Importing," *South Dakota Business Review*, 42 (August 1983):4.

²³National Education Association tabulations from U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey.

²⁴National Education Association, "Average Faculty Salaries in Public Institutions of Higher Education By State, 1978-79," Research Memo, 1980, pp. 5-6.

²⁵The median (by definition, half the people in a group earn more than the group median and half earn less) is used in Table 11 because in some of the classifications the average may be skewed by a few unrepresentative individuals. For example, if a few lawyers or sales persons in the state have very large earnings, the averages in those groupings might be unrealistically high, and the median would be more representative of typical earnings of people in each group.

²⁶There are many studies of factors affecting industrial location. Three of the more recent ones are Roger W. Schmenner, *Making Business Location Decisions* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1982); Advisory Commission on Intergovernmental Relations, *Regional Growth: Interstate Tax Competition* (Washington, D.C.: U.S. Government Printing Office, March 1981); and Hsin-Min Tong, *Plant Location Decisions of Foreign Manufacturing Investors* (Ann Arbor, Mich.: UMI Research Press, 1979).

²⁷*Ibid.*

SOUTH DAKOTA INCOME AND EMPLOYMENT

TOTAL PERSONAL INCOME
United States, Plains Region and States
First Quarter 1983-Second Quarter 1984
(Millions of Dollars, Seasonally Adjusted at Annual Rates)

	1983				1984		% Change
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	2nd Qtr. 1984 2nd Qtr. 1983
United States	2,651,491	2,704,870	2,753,109	2,825,955	2,908,890	2,970,903	9.8
Plains States	189,927	193,811	199,622	206,343	216,289	216,939	11.9
Iowa	29,511	30,470	31,619	32,769	35,079	34,515	13.3
Kansas	28,762	29,126	29,920	31,004	32,581	33,102	13.7
Minnesota	47,396	48,693	50,005	51,390	53,275	54,364	11.6
Missouri	52,620	53,730	55,115	56,616	58,682	59,597	10.9
Nebraska	17,104	17,419	18,200	18,913	20,065	19,518	12.0
North Dakota	7,740	7,663	7,880	8,472	9,008	8,279	8.0
South Dakota	6,793	6,710	6,884	7,178	7,599	7,564	12.7

Note: Detail may not add to totals because of rounding.

Source: U.S. Department of Commerce, Bureau of Economic Analysis

SOUTH DAKOTA NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
September 1983 and September 1984
(In Thousands)

				Average Weekly Hours		Average Hourly Earnings	
	Sept. 1983	Sept. 1984	% Change	Sept. 1983	Sept. 1984	Sept. 1983	Sept. 1984
Total Employment	239.1	241.3	0.9				
Mining	2.7	2.7	0.0				
Construction	9.9	9.8	-1.0				
Manufacturing	26.8	28.3	5.6	41.8	42.8	\$7.32	\$7.14
Durable Goods	13.9	15.3	10.1	41.5	42.2	7.02	6.99
Fabricated Metals & Mach.	8.7	9.8	12.6				
Nondurable Goods	12.9	13.1	1.6	42.1	43.6	7.68	7.33
Food & Kindred Products	7.7	7.5	-2.6				
Paper, Printing & Publishing	2.6	2.7	3.8				
Transportation & Pub. Utilities	12.5	12.4	-0.8				
Transportation	7.0	7.1	1.4				
Communication & Pub. Utilities	5.5	5.3	-3.6				
Wholesale & Retail Trade	63.1	65.0	3.0				
Wholesale Trade	16.2	16.2	0.0				
Durable Goods	7.1	7.0	-1.4				
Nondurable Goods	9.1	9.2	1.1				
Retail Trade	47.0	48.8	3.8				
Finance, Insurance & Real Estate	12.7	13.0	2.4				
Services	54.7	55.0	0.5				
Hotels, Amuse., Pers. & Business	15.1	15.3	1.3				
Medical & Health	22.3	21.7	-2.7				
Educational, Membership & Social	14.4	15.2	5.6				
Government	56.6	55.0	-2.8				
Federal	10.4	10.6	1.9				
State	15.6	14.6	-6.4				
State Education	7.5	6.4	-14.7				
Local	30.6	29.8	-2.6				
Local Education	16.9	16.2	-4.1				

Source: South Dakota Department of Labor, "Labor Bulletin".

SOUTH DAKOTA AGRICULTURAL INDICATORS

CROP PRODUCTION SUMMARY
SOUTH DAKOTA
October 1, 1984
(000's Bushels)

Crop	1983	Estimated 1984
Wheat, All	89,729	116,578
Winter	51,250	57,350
Durum	2,079	3,128
Other Spring	36,400	56,100
Corn, Grain	104,410	194,400
Barley	23,100	29,580
Oats	79,200	84,100
Rye	8,740	10,140
Flaxseed	1,365	1,550
Soybeans	26,103	30,160
Sorghum, Grain	13,630	21,600
Sunflowers	450,460	654,500
Potatoes, Fall	2,310	2,100
Hay, All	7,592	7,838
Alfalfa	5,382	5,543
Other	2,210	2,295

Source: South Dakota Crop & Livestock Reporter

PRICES RECEIVED BY FARMERS FOR COMMODITIES SOLD--SOUTH DAKOTA
September 1983 and September 1984

Commodity and Unit	Base Period Price 1910-1914 Average	Sept. 1983	Sept. 1984	Sept. 1984 Price as % of Base	Sept. 1984 Price
					Above or Below Sept. 1983
Wheat Bu.	.85	3.60	3.48	409	-3.3
Corn Bu.	.51	3.03	2.85	559	-5.9
Oats Bu.	.35	1.57	1.49	426	-5.1
Barley Bu.	.59	2.12	1.95	331	-8.0
Flaxseed Bu.	1.68	7.17	5.92	352	-17.4
Milk, Whol. Cwt.	1.82				
Eggs Doz.	.196				
Cattle Cwt.	5.24	53.30	57.00	1088	6.9
Calves Cwt.	6.08	58.90	67.20	1105	14.1
Hogs Cwt.	7.07	44.00	46.20	653	5.0
Sheep Cwt.	4.24	14.40	14.90	351	3.5
Lambs Cwt.	5.66	47.00	62.50	1104	33.0
Wool Lb.	.178	.59	.70	393	18.6

*Season average price only.

Source: South Dakota Crop & Livestock Reporter

SOUTH DAKOTA LOCAL CONDITIONS INDICATORS

(% Change Like Period Previous Yr.)

City	Taxable Sales ¹		Telephone Services ²	Housing Starts ³	Postal Indicator ⁴	Employment ⁵
	Total	Retail				
Aberdeen	4.3	2.9	-2.8	0.2	-36.6	6.1
Belle Fourche	2.0	10.4	47.6	0.2	+14.4	-1.3
Brookings	10.1	32.4	4.3	---	+34.5	-10.8
Canton	2.8	10.7	28.8	0.2	---	-5.8
Chamberlain	11.1	14.1	2.8	1.7	-29.4	-11.1
Deadwood	2.3	6.1	0.8	-1.3	---	7.9
DeSmet	8.4	-0.7	49.3	-0.6	+156.6	-4.5
Elk Point	3.7	18.4	17.2	-2.7	---	-0.4
Hot Springs	6.7	7.6	41.6	---	+47.8	---
Huron	4.3	6.0	9.1	-0.7	-42.1	4.7
Lead	6.0	-2.0	28.5	-0.9	---	3.3
Madison	14.0	0.3	42.5	-7.8	+ 5.3	7.9
Milbank	-4.5	3.4	-22.1	0.4	-73.0	4.5
Mitchell	4.8	8.3	25.0	-0.9	+66.6	-5.2
Mobridge	4.2	0.9	15.6	---	+181.7	-2.2
Pierre	7.6	16.9	11.2	-9.4	- 6.2	-2.9
Rapid City	-3.2	12.6	21.9	3.6	-11.4	-0.1
Sioux Falls	12.7	7.3	15.7	1.6	+ 8.7	25.6
Spearfish	11.3	2.6	46.6	---	+64.6	32.6
Sturgis	11.2	9.5	21.1	0.7	+11.3	---
Vermillion	3.0	4.2	14.2	-3.1	-85.4	1.5
Watertown	5.1	6.2	2.1	0.5	+41.4	---
Winnon	-2.3	5.4	16.5	1.6	-14.3	2.0
Yankton	5.6	-7.4	9.9	-1.0	-56.2	-5.0
					+195.5	-48.0
						-0.9

*Based on County Data

¹Percentage change for July-August, 1983 and 1984.²Percentage change for January-September 1983 and 1984. Data reported for housing represents the value of housing starts.³Percentage change for Sept. 1983 and 1984. Telephone data are for the number of access lines in service.⁴Percentage change for third quarter 1983 and 1984. Included in postal indicators are: postage stock sales, printed stamped envelopes, postage meters for customers, permit imprint postage (3rd class regular), and second class postage.

SOUTH DAKOTA Business Review

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CONSUMER PRICE INDEX

United States
Jan.-September 1984
(1967=100)

Item	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Unadjusted % Change Jan.-Sept. 1984
All Items	305.2	306.6	307.3	308.8	309.7	310.7	311.7	313.0	314.5	3.0
Food & beverages	292.5	294.2	294.3	294.5	293.6	294.3	295.3	296.9	296.4	1.3
Food	300.2	302.1	302.2	302.3	301.4	302.0	303.2	304.8	304.2	1.3
Alcoholic beverages	219.9	219.9	220.7	221.3	221.5	222.4	222.5	222.9	223.1	1.5
Housing	329.6	331.0	331.5	333.2	334.6	336.2	338.1	339.5	341.4	3.6
Shelter	353.0	354.0	355.5	357.8	358.9	360.2	362.7	364.6	366.5	3.8
Renters' Costs	105.7	106.0	106.5	107.4	107.8	108.2	108.9	109.6	110.2	4.3
Homeowners' Costs	104.9	105.1	105.6	106.2	106.5	106.8	107.6	108.1	108.7	3.6
Fuel & Other Utilities	378.2	383.0	380.1	380.9	385.5	390.0	393.9	395.5	397.0	5.0
Fuel	473.2	479.6	475.2	476.0	483.5	490.7	496.5	498.6	500.1	5.7
Fuel oil, coal & btld. gas	637.7	688.6	660.0	650.7	649.2	646.0	637.4	625.5	622.1	-2.4
Gas (piped) & electricity	431.9	429.0	429.5	432.3	441.4	450.6	459.1	463.9	466.4	8.0
Other util. & Pub. Services	224.6	228.0	227.4	228.2	228.8	229.4	230.6	231.3	232.7	3.6
Household furnishing	241.3	240.4	241.2	242.3	242.4	242.3	241.9	242.2	244.1	1.2
Apparel & upkeep	199.0	196.2	198.8	199.2	198.9	197.4	196.6	200.1	204.2	2.6
Transportation	306.7	305.8	306.9	309.6	312.2	313.1	312.9	312.9	313.7	2.3
Private transportation	301.7	300.8	301.9	304.8	307.4	308.1	307.5	307.5	308.4	2.2
Public transportation	378.2	377.4	377.4	377.1	379.8	385.2	389.3	390.8	389.5	3.0
Medical care	368.6	373.2	374.5	375.7	376.8	378.0	380.3	381.9	383.1	3.9
Entertainment	250.9	251.5	251.7	253.8	253.5	254.5	255.3	256.4	257.3	2.6
Other goods and services	299.8	301.5	302.1	302.8	303.2	304.4	306.5	307.2	314.6	4.9

*Consumer Price Index for all Urban Consumers

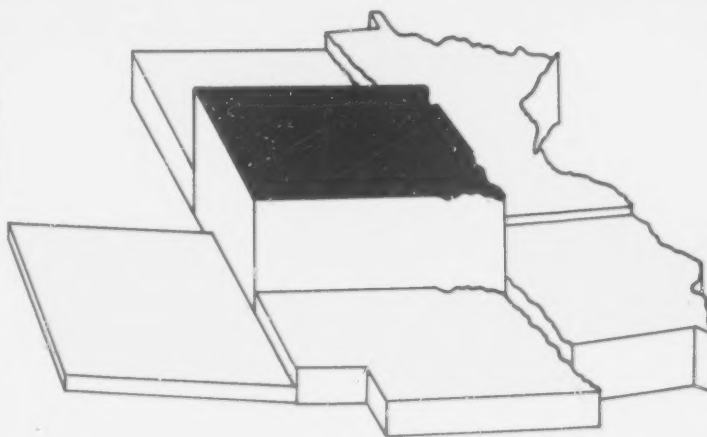
Source: Bureau of Labor Statistics, U.S. Dept. of Labor

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SOUTH DAKOTA Business Review

March 1985
Vol. XLIII, No. 3



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	Latest Quarter	SOUTH DAKOTA			UNITED STATES		
		Latest Quarter	Year Ago	Percent Change	Latest Quarter	Year Ago	Percent Change
General Indicators							
Personal Income (\$ Mil.)	1984-3	7,669	6,884	11.4	3,032,708	2,753,109	10.2
Farm Prop. Income (\$ Mil.)	1984-3	532	357	49.0	26,139	10,700	144.3
Non-ag Employment (Thous.)	1984-4	242	237	2.1	95,480	91,686	4.1
Unemployment Rate (%)	1984-4	4.3	4.8	10.4	7.0	8.2	-14.6
Total Employment (Thous.)	1984-4	322	314	2.5	106,186	102,827	3.3

Note: All U.S. data seasonally adjusted except for the unemployment rate and total employment. For South Dakota data only personal income and farm proprietors' income are seasonally adjusted.

FIFTEEN YEARS EUROPEAN BUSINESS AND ECONOMIC STUDIES TOUR

Benno Wymar, Philip C. Fisher and Galen D. Hadley
Introduction

In the winter of 1970/71 the USD School of Business operated its first overseas study tour with a group of 21 students and two professors. Already at that time, international economic issues were becoming increasingly important to South Dakota. For example, foreign markets accounted for about fifty percent of South Dakota's cash crops. There were also many job opportunities abroad during the 1970s. Indeed, it was not uncommon to have USD

(continued on page 4)

About the authors: Dr. Hadley is Professor of Accounting and University of South Dakota Vice President, Dr. Fisher is Director of The University of South Dakota School of Business Graduate Studies, and Dr. Wymar is the Study Tour coordinator. All three accompanied the student group during the 1984 study tour.

MORE ON SOUTH DAKOTA'S DUAL ECONOMY

Randall Stuefen

The possibility of a "Dual Economy" in South Dakota was explored in the March 1984 issue of the **Business Review**. The dual economy designation refers to the segmentation of the state's economy based upon population data. The counties were divided into two groups; the counties of the largest ten cities were identified as being the more urban group and the other or remaining counties were classified as being more rural. (see Table 1.) The economies of the urban counties are assumed to be more diversified while the economies of the other counties are assumed to be less diversified and consequently more

(continued on page 7)

About the author: Randall Stuefen is Associate Director of the Business Research Bureau, School of Business, University of South Dakota, Vermillion, South Dakota.

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Trend Of Business

NATIONAL ECONOMY

The national forecast appears more optimistic than reported in the December **Review**. Forecasters are estimating that real GNP will increase from 3 to 4.5 percent in 1985 over 1984. This is more optimistic than the slow to no real growth scenarios that were being discussed in December. The rate of inflation as estimated using the GNP deflator is being forecast as low as 2.3 percent and as high as 4.5 percent. The split between real growth and inflation in the nominal growth of the economy is healthy. The expectation of some economists is that the rate of inflation will creep higher toward the end of this year and be in the 6 to 7 percent range by mid 1986. The strong dollar is encouraging the purchase of imported goods and putting downward pressure on the price of domestic items. Declining oil prices have also provided a dampening effect on the inflation rate. It appears that an inventory correction is continuing to take place to adjust for the imbalance in the inventory to sales ratio. The national unemployment rate is currently 7.2 percent and is expected to drop slowly to the 7 percent level by year's end. Housing starts are expected to stabilize or increase in 1985 at about 1.7 million units, but the outlook for 1986 is one of a slight cooling. Housing starts are expected to drop by about 100 thousand units to around 1.6 million. Overall, the economic indicators are reflecting the continued adjustment in inventories. Concern with the budget deficit continues to be an issue reaching all sectors of the economy through interest rates.

THE SOUTH DAKOTA ECONOMY

Most of the economic indicators of business activity maintained by the Business Research Bureau experienced increases in the fourth quarter of 1984 compared to this period a year ago.

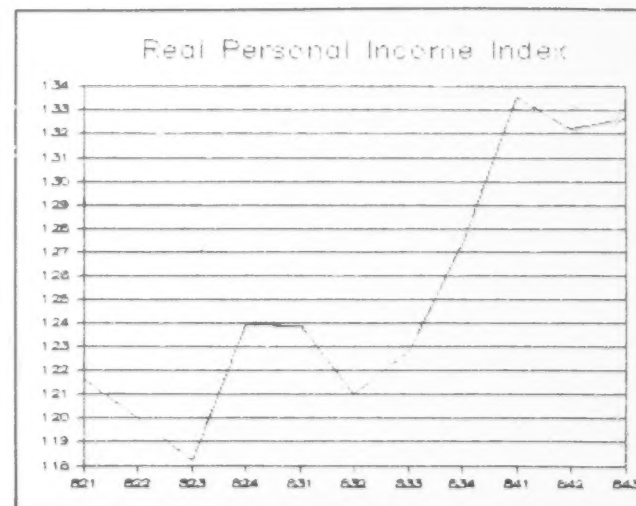
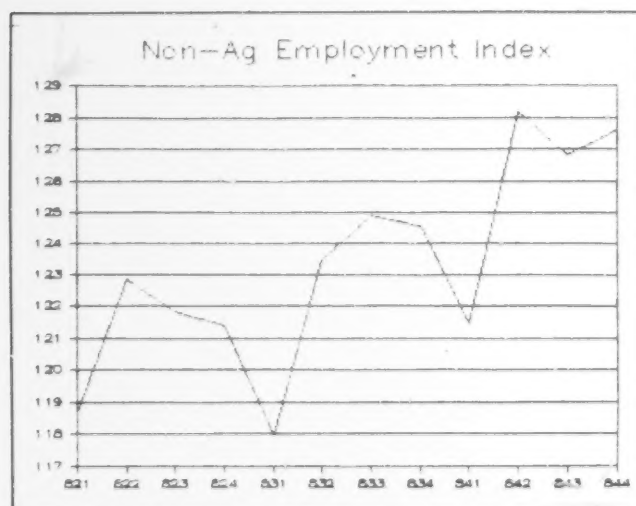
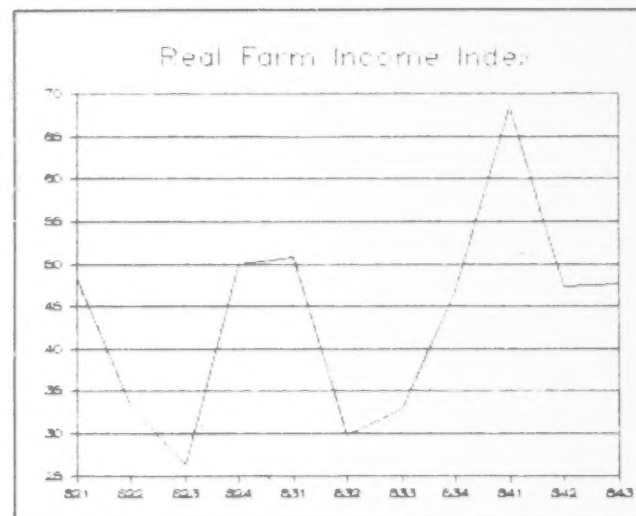
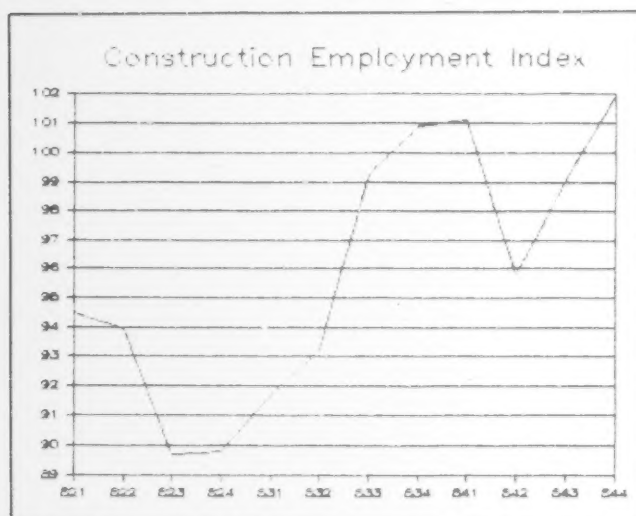
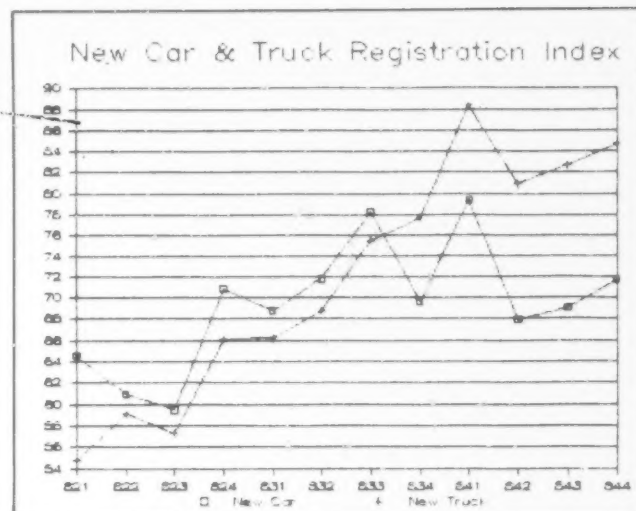
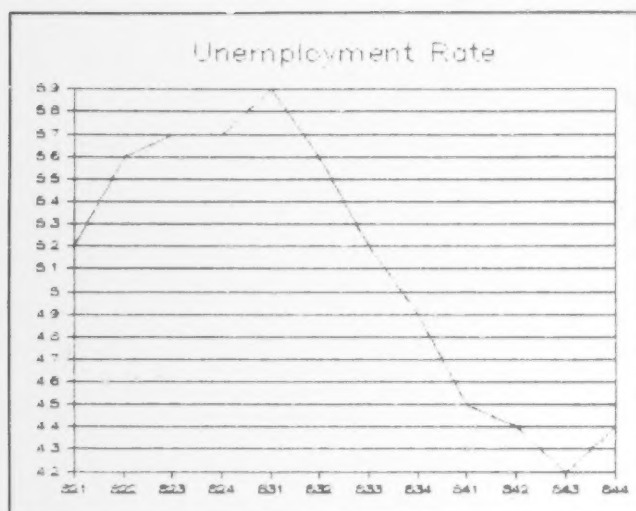
The employment sector showed some improvement over last year with non-agricultural employment rising 2.4 percent over last year on a seasonally adjusted basis. Construction employment was up slightly (1.1%) in the fourth quarter of 1984 compared to the fourth quarter 1983. For the year 1984, construction employment registered a 6.0 percent gain compared to last year, the second straight yearly increase after a four year downswing.

The South Dakota unemployment rate was 4.4 percent in the fourth quarter of 1984 compared to the previous quarter of 4.1 percent. This is still below the fourth quarter 1983 rate of 4.9 percent and well below the United States fourth quarter 1984 rate of 7.0 percent.

Personal income in South Dakota increased 0.4 percent in the third quarter of 1984 compared to the second quarter and 11.4 percent compared to the same period a year ago. That exceeded the 10.2 percent gain for the U.S. Farm proprietor's income for this same period rose slightly (0.6 percent). The gain compared to the preceeding year, was a significant 44.2 percent. Seasonally adjusted sales of new cars and trucks increased in the fourth quarter of 1984 compared to the third quarter. Car sales rose 3.8 percent with new truck sales slightly trailing at 2.4 percent.

SOUTH DAKOTA BUSINESS & ECONOMIC INDICES

Quarterly Data 1982 - 1984
Adjusted for Seasonal Variation



School of Business graduates brief the study groups in several European countries.

For all 15 years the goals of the study tour have remained the same: that students and faculty learn what is of international importance to their profession and to South Dakota. Naturally, due to changing circumstances, the emphasis has changed over time. For example, during the early 1970s investments abroad received much attention, but ten years later the flow of investments had reversed and most U.S. states were competing for foreign investments.

What follows is a discussion of the major topics which received attention during the 1984 European Business and Economic Study Tour.

Agricultural Trade

Both faculty members and students expressed surprise at the attention agricultural trade received throughout the study tour. It was even discussed at some of the "Big Eight" accounting firms.

The main issue was the greatly increased corn glutton import from the United States. Mrs. Pinnoo, a spokesperson at the GEM grain elevators in Rotterdam (one of the largest in the world) told the group that 72 percent of last year's production turnover was made up of corn glutton feed and other derivatives, while 28 percent represented grains and oil seeds. Ten years ago, she said, approximately the reverse would have been true.

Mr. J. O. Lund, a spokesperson at the European Community (EC) Headquarters in Brussels pointed out that the EC was trying to reduce dairy production but that the greatly increased derivative imports were actually encouraging them. According to Mr. Lund the Europeans are not united in favoring import limits on the derivatives. The British, along with the Germans and the Dutch, have suggested lowering European corn prices instead, as a means of reducing the imports from the United States.

U.S. Agricultural Attache R. Anderson (a SDSU graduate) told the visiting South Dakota group at the U.S. Embassy in the Hague that the Dutch are making especially good use of the U.S. corn glutton feed. Feeding it to their cows and chickens has helped in making the Netherlands the world's number one exporter of dairy and poultry products.

Mr. Fred Hejduk of the European Regional Office of U.S. Wheat Associates in Rotterdam stated that the European Common Agriculture Policy (CAP) by now has become a bureaucratic nightmare. Its original goal was to assure European food security, but Europe now produces much more than it can consume and much of its surplus is being dumped in traditional U.S. export markets throughout the world. An alternative is to reduce European agriculture production by encouraging farmers to look for other sources of income, but very high unemployment rates throughout Europe make that very difficult, according to U.S. Agricultural Attache Anderson.

Investments and Tourism

The visiting South Dakota group was also surprised to learn that, in spite of the relatively high value of the U.S. dollar, interest in investing in the United States was quite high. Stephen Kaminski, Commercial Officer at the U.S. Consulate General in Duesseldorf, Germany, told the

group that small and medium size firms most frequently contacted his office to inquire about investment opportunities in the United States. Perhaps the main reason for this interest was wide-spread strikes with labor unions demanding a 35 hour week (a reduction of five hours), a six week vacation (rather than five weeks) and earlier retirement. However, the South Dakota group also learned throughout its stay in Europe that European business people were very much impressed by the performance of the U.S. economy and probably simply wanted to be part of it.

Regarding tourism, William Tappe, director of the Paris office of the U.S. Travel and Tourism Administration, told the group that the high value of the dollar was making it more difficult to sell U.S. destinations. Nevertheless, the U.S. remained the number one destination for French tourists. He added that many French people now prefer to travel on their own in the hope of getting a better idea as to what America is really like. Mr. Tappe also pointed out that exchange programs were becoming more popular with the French and at the same time reducing the cost of a stay in the United States. Under the exchange program French people trade homes with American people for a period of time. Mr. Tappe's office had several publications on South Dakota available and in both English and French.

Employment Practices

Employment practices are much more extensively regulated by national laws in the countries we visited than they are in the United States. These laws are intended to promote job security and economic stability for workers, and have been largely successful. Their unintended result, however, has been to raise obstacles to, and increase risk of, new business ventures. Consequently, they have probably slowed the recovery of the European Community and contributed to the unemployment of the very people they were intended to protect.

Western European countries have much more expansive and expensive systems of social security. In addition to old-age, survivor, and disability pensions; workmen's compensation; and unemployment insurance, most workers are covered by national health insurance. Benefits are generous. In West Germany, for example, normal retirement is at age 63; unemployed workers may retire with full benefits at age 60. Unemployment insurance will pay 80 percent of normal income, and medical care, dental care, and hospitalization are free. The price tag on this package amounts to contributions currently at 35 percent of the workers' paychecks. With average wages in West Germany slightly in excess of \$5.00 an hour, these benefits add a substantial increment to the cost of employing workers.

A unique feature of Western European employee relations is the policy of codetermination. First enacted into law in West Germany in 1952, codetermination laws have also been passed in some form in the Netherlands, France, Denmark, Norway, Sweden, Austria, and Luxembourg. The most common institution of codetermination is the works council. Works councils are typically composed of equal numbers of representatives elected by stockholders and by employees. Usually one employee position on the council is reserved for a representative of managers, giving

a stockholder-manager coalition a small majority. While the authority of works councils varies from country to country, they will negotiate matters not settled in collective bargaining with the unions, assure that union contracts are adhered to, handle employee grievances (arbitration is uncommon in Europe), and approve personnel policies.

One result of this is that employment-at-will has been replaced in Western Europe with a system in which employees who get through a short probationary period cannot be discharged unless the works council is convinced that there is just cause for discharge. Therefore, European employers are much more reluctant to hire new employees and very careful in screening those they do hire.

One of the most interesting aspects of Western European employment practices is the widespread use of apprenticeship programs to provide entry into semi-skilled, skilled and even managerial jobs. Mandatory education in Western Europe typically lasts ten years or to age sixteen. At that point, students who continue their education enroll in either a university preparatory school or a vocational school. Students who complete a vocational program then seek to become employed as apprentices.

In West Germany, the apprenticeship program is administered by the Chamber of Commerce. Apprentices work at low salaries for a fixed period (three years for example), learn on the job, receive classroom instruction, and must pass examinations administered by the Chamber. Apprentices who succeed in completing their requirements are guaranteed employment by the company which trained them. The result is a job training program that works, but at a cost which once again makes employers very conservative in their hiring practices.

Western Europe has not enjoyed the rapid economic recovery which most sectors of the U.S. economy have experienced. Unemployment remains at double-digit levels, while there are undoubtedly several factors which contribute to this situation, not the least of these is a system of laws which have added to the fixed cost of hiring workers. The very class of people who have been the supposed beneficiaries of the most complete "safety nets" in the history of Western civilization are now victims of the resultant sluggish economy which will continue to erode their standard of living.

Accounting Practices

There are differences in accounting practices in several of the European countries from accounting practices in the United States. Without going into great detail the following observations highlight some of these differences.

Arthur Andersen and Company was the accounting firm visited in Germany. This office was treated as a full fledged office in the world-wide partnership. Partners in this office shared world-wide profits and losses the same as any other partners in the firm. There were no Americans working at this office and the clients were primarily German owned and operated firms.

The largest difference between German accounting practices and U.S. accounting practices was in the nature of Generally Accepted Accounting Principles (GAAP). In the U.S. GAAP generally come from such private sector entities as the Financial Accounting Standards Board. Ger-

many, on the other hand, derives its GAAP from Governmental Tax Law. This leads to situations such as occurred a few years ago, when the tax law was changed to permit 100 percent write-off of all fixed assets purchased in a given year. This meant that for financial statements all fixed assets purchased that year were written off to expense rather than placed on the books as an asset to be depreciated.

Ernst and Whinney of The Netherlands was the firm visited next on our tour. This office was staffed much more by foreign nationals and was very international in nature. The managing partner was a Scotsman. The firm's client base was primarily subsidiary companies of other E & W clients. For example, a large client was a British Petroleum subsidiary.

A primary concern of the people at E & W was the unitary tax controversy. A unitary tax is a tax on a subsidiary's fair share of the parent firm's entire profit, rather than a tax on the subsidiary's actual profit or loss. Certain states in the U.S. have adopted this form of tax, and people at E & W felt this discouraged foreign firms' investment in the United States.

Alderweireldt, Tinnemans, Van der Steen & Company of Belgium is a member firm of Touche Ross International. It is a Belgian firm that adheres to the standards of TRI. Its clients are primarily Belgian and it does work for TRI clients on a fee basis. The ownership and management is entirely Belgian and there were no Americans working at this firm.

The prescription accounting encountered in Germany was prevalent in Belgium. For example, the government determines the form that the income statement and balance sheet must take. A chart of accounts is given by the government and must be followed in each accounting system.

In each country, it was believed the Fourth Directive of the European Community will change the accounting practices in Europe. The Fourth Directive co-ordinates laws covering the presentation, publication, and content of annual reports and accounts and the principles underlying them. It also establishes minimum requirements of financial disclosure. Uniformity between countries will be more common.

Custom Differences

Going back to the issue of surprises, it probably took participants of the study group some time to adjust to the way everyone was being treated. It seemed that most businesses and government agencies, and even the labor union, went out of their way to arrange first class briefing programs. Briefing officials included heads of departments, PH.D.s and members of the nobility. Why? Maybe to show that Americans are still quite popular in Europe, regardless of what many reported anti-American demonstrations seem to indicate. But another reason might have been that the group was considered part of the elite (a thought perhaps rather foreign to American thinking). From a practical viewpoint, it most likely took students some time to get accustomed to letting waiters know what wine to drink with which dish and at the same time keeping an eye on following proper protocol, such as who is the

first to start eating, the guest or the host official.

Do class distinctions still play such an important role in Europe? It appears so. Even during the briefing at the German Federation of Trade Unions (similar to the AFL-CIO) the South Dakota group was told that a white collar union and a civil service union had refused to join the federation probably due to class differences. And at the Paris office of the Parex accounting firm (Deloitte Haskins & Sells' French partner firm) the group was told that the top French accounting firms hire staff members mainly from the old elite schools in France. With the European public school system, even today, a young person's basic destiny is essentially decided at grade four or five. If a student has the proper grades, he or she goes on to prep school and a good chance of studying at a university. If not, the person will have to attend a lower level school with few chances of getting a high level job.

During the briefings at the accounting firms in each of the four European countries visited, the group also learned that it takes much longer to get ahead on the Continent. To obtain the CPA or the equivalent one has to be at least twenty-eight years of age and it is not uncommon to be well over thirty before reaching that goal.

Many of the differences in customs and practices are due to the different environment. The fact that Europeans tend to be much more formal can easily be explained by the fact that Europe is more densely populated. In general, they are concerned with being left alone rather than trying to make new friends quickly. With so many people it is also easier to understand why it might take longer to get ahead.

The extensive social security programs of Europe can also be explained in terms of historical developments. Many Europeans lost everything they had earned and saved twice during their lifetime, so they value that "safety net" very highly, making it difficult to reduce its benefits.

It is not difficult to understand why many business executives would prefer to ignore these non-business issues. However, most people would agree that, if one wants to sell something to anyone, it is wise to try to understand the purchaser's thinking and attitudes, whether one likes them or not.

Conclusion

The above comments should make it quite clear that the foreign study tour program provides an excellent educational experience for our students and faculty members. South Dakota as a whole surely benefits from having more of its future business leaders obtain their foreign exposure through this program.

The 1984 Itinerary.

May 19 - Departure from South Dakota

May 20 - Arrival in Frankfurt, Germany

Train trip along the Rhine river to Duesseldorf;

May 21 - Morning: Briefing at German Federation of Labor Unions (DGB) Headquarters (Mr. Dieter Wagner - International Dept.)

Lunch as guests of DGB

Afternoon: Briefing at U.S. Consulate General (Mr. Stephen C. Kaminsky - Commercial Officer);

May 22 - Morning: Briefing at Arthur Andersen & Co. accounting firm (Mr. Rudi Klauer)

Lunch as guests of Arthur Andersen & Co.

Afternoon: Briefing on the German social security system at Duesseldorf's City Hall (Mr. Hermann Kleinbreuer - head of Duesseldorf's municipal health care insurance system);

May 23 - Morning: Briefing at Deutsche Bank (Germany's largest commercial bank) (Count F. von Westerholt and Mr. H.J. Lambert Heimes)

Lunch as guests of Deutsche Bank at the Investors Club

Afternoon: Briefing at HANDELSBLATT (Germany's only business daily) and WIRTSCHAFTSWOCHE (leading business weekly) (Mr. Hartmut Froels - executive editor)

May 24 - Morning: Briefing at KKB bank (a wholly owned Citibank subsidiary) (Mr. G. Veldhoen, Mr. Peter Luxem and Dr. Gerd Uhe)

Lunch as guests of KKB

Afternoon: Visit of and briefing at NOWEA Duesseldorf Trade Fair Grounds (Ms. G. Schwager, Mr. G. Ulrich and Mr. Klaus Schneider);

May 25 - All-day: Reception and official luncheon in Ratingen (Vermillion's German sister city (Mr. Ernst Dietrich, mayor and Dr. Alfred Dahlmann, city manager)

Evening: Meeting with Ratingen students;

May 26 - Morning: Sight-seeing program in Cologne (2,000 year old city)

Afternoon: Visit to Benrath hunting castle in southern part of Duesseldorf;

May 27 - Morning: Free time

Afternoon: Football game Panther Duesseldorf vs. Berlin Adler as guest of the Duesseldorf team and its president, Mr. Peter Becker;

May 28 - Morning: Briefing at the Duesseldorf Chamber of Industry and Trade (Dr. Udo Siepmann)

Briefing at the Duesseldorf Stock Exchange (Mr. Elmar Mueller-Krey)

Noon: Visit to the Stock Exchange gallery to observe the floor activities.

Lunch as guest of Commerzbank

Afternoon: Briefing at Commerzbank (Germany's third largest commercial bank) (Mr. Kellenbenz and Mr. Rennebaum);

May 29 - All-day: Tour of and briefing at IBM Germany Computer Training Center in Essen (Dr. J. Dieckow, Mr. Tuebing and Mr. Haufe)

Lunch as guests of IBM Germany;

May 30 - Morning: Free time

Afternoon: Reception by Duesseldorf's Lord Mayor, Mr. Josef Kuerten and presentation of a Indian Peace Pipe;

May 31 - Morning: Train travel from Duesseldorf to Rotterdam

Afternoon: Rotterdam harbor tour by ship (Rotterdam is the world's largest harbor);

June 1 - Morning: Briefing at European Regional Office of U.S. Wheat Associates (Mr. Fred Hejduk)

- Afternoon: Tour of and briefing at GEM Grain Elevators in Europort (Mrs. Pinnoo);
- June 2 - All-day: Sight-seeing visit to Amsterdam;
- June 3 - All-day: Sight-seeing visit to The Hague (seat of Dutch Parliament) and Scheveningen (seaside resort);
- June 4 - Morning: Briefing at U.S. Embassy in The Hague (Mr. Rolland Anderson, Agricultural Attache')
Lunch as guests of Ernst & Whinney
Afternoon: Briefing at Ernst & Whinney accounting firm in The Hague (Mr. Ronald Smith, Mr. Tim Hannon, Mr. Yost Mittendorf and Mr. Wim Tepstra);
- June 5 - Morning: Briefing at International Court of Justice in The Hague (Mr. Bernard Noble)
Afternoon: Train travel from Rotterdam to Brussels;
- June 6 - Morning: Briefing at European Community Headquarters (Mr. B. Pianetti della Stufa, Mr. J.O. Lund and Mr. M. Jottard)
Lunch at the EC Headquarters
Afternoon: Briefing at the U.S. Embassy (Mrs. Geraldine Chester, Mr. Roger Lowen and Mr. Thomas Caswell);
- June 7 - Morning: Briefing at the U.S. Mission to the European Community (Mr. Homer Sabatini and Mr. Timothy Bennett)
Afternoon: Briefing at THE WALL STREET JOURNAL (European Edition) (Mr. Paul Atkinson and Mr. John Geddis);
- June 8 - Morning: Free time

- Afternoon: Briefing at Aldeweireldt, Tinemans, Van der Steen & Co. accounting firm (representing Touche Ross International) (Mr. Roger Verstraelen, Mr. Philippe Ruelants and Mr. Luc Moeremans);
- June 9 - All-day: Sight-seeing visit to Brugge (mediaeval trading town near the North Sea coast);
- June 10 - Morning: Train travel from Brussels to Paris
Afternoon: Sight-seeing walk in Paris;
- June 11 - All-day: Sight-seeing in Paris since religious holiday;
- June 12 - Morning: Briefing at Deloitte, Haskins & Sells accounting firm (Mr. Richard Harris, Mr. Henry Marshall and Mr. Norbert Benaiche)
Afternoon: Free time;
- June 13 - Morning: Briefing at U.S. Embassy (Mr. Robert Barr, Mr. Miles Denny-Brown and Mrs. Linda Jones);
Afternoon: Briefing on Tourism (Mr. William Tappe, director of U.S. Travel and Tourism Administration, Paris Office);
- June 14 - All-day: Sight-seeing visit to Versailles;
- June 15 - Morning: Briefing at Organisation for Economic Co-Operation and Development (OECD) Headquarters (Mrs. Helga Fischer, Mr. Ulrich Stiehler and Mr. A. Fernandez)
Afternoon: Free time to prepare for night time departure on Paris-Moscow night express for Frankfurt, German;
- June 16 - Departure from Frankfurt to Twin Cities International Airport - arriving in South Dakota in the evening.

(continued from page 1)

(More on South Dakota's Dual Economy....)

agriculturally dependent. It is recognized that there are communities that are exceptions to this assumption and that "other" factors also are important influences in a community's economic performance. However, the segmentation of the state's economy by population has proven quite helpful in adding clarity to trends in South Dakota retail sales. To determine the importance of a few of these "other" factors and to test a hypothesis, a survey

was circulated in the September **Business Review**. The following text includes discussion of the original concept of a dual economy, the hypothesis tested regarding an aging business community in small South Dakota towns and the relative importance of a few of the possible "other" factors.

In the period of 1977 through 1982, no evidence was found that supported the idea that a dual rural and urban economy existed in the state. However, starting in 1983 the more urban economies of the state started to noticeably outperform the more rural economies. The trend in retail sales for 1984 was a continuation of the trend started in 1983 with one interruption. The economies of the counties containing the largest ten cities outperformed the remainder of the state with the exception of the July-August bimonthly reporting period. (see Table 2.) In that period, Pennington county experienced a decrease in retail sales of 2.1 percent which offset Minnehaha's double digit growth performance and the positive performance of the group as a whole. The show of retail strength by the more rural counties relative to the urban counties appears to be partially attributable to Pennington county's poor showing. The importance of Pennington county in summary statistics addressing retail sales results from it's large percentage share of retail sales in the urban group.

Table 1

10 Largest Cities-South Dakota

Incorporated Places	Counties	1980 Rank	Population 1980	Population 1970
Sioux Falls city ¹	Total	1	81,343	72,488
	Lincoln (pt. in)		161	---
	Minnehaha (pt. in)		81,182	72,488
Rapid City city	Pennington	2	46,492	43,836
Aberdeen city	Brown	3	25,956	26,476
Watertown city	Codington	4	15,649	13,388
Brookings city	Brookings	5	14,951	13,717
Mitchell city	Davison	6	13,916	13,425
Huron city	Beadle	7	13,000	14,299
Yankton city	Yankton	8	12,011	11,919
Pierre city	Hughes	9	11,973	9,699
Vermillion city	Clay	10	10,136	9,128

¹Sioux Falls is considered as being solely in Minnehaha County in this paper.

TABLE 2

BIMONTHLY PERIOD	JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEPT-OCT	NOV-DEC
	1984	1984	1984	1984	1984	1984
NATIONAL RETAIL SALES (1) (2)	14.8%	11.9%	11.1%	8.7%	7.8%	8.9%
NATIONAL INDEX OF CONSUMER SENTIMENT (3) (3)	100.1	101	98.1	96.6	100.9	95.7
SO. DAK. RETAIL SALES (4)	13.6%	4.3%	15.2%	5.3%	6.4%	3.2%
COUNTIES OF LARGEST TEN CITIES (4) (5)	15.0%	7.4%	17.8%	5.0%	7.7%	4.6%
ALL OTHER COUNTIES (4) (5)	10.3%	-1.8%	9.6%	6.6%	3.3%	.0%

(1) CURRENT DOLLARS

(2) BUSINESS CONDITIONS DIGEST, U.S. DEPARTMENT OF COMMERCE

(3) FIRST MONTH IN PERIOD, (1ST QTR. 1966=100)

(4) SOUTH DAKOTA DATA ESTIMATED THROUGH MAY-JUNE 1984

(5) SEE "BUSINESS REVIEW", VOL. XLII, NO. 3, MARCH 1984

(6) LARGEST TEN CITIES BY POPULATION

The 1984 retail sales growth rate for the state in general was better in the first half of the year than in the second half. The state pattern of performance followed along with the national experience. The counties of the larger communities more closely followed the national trend than did the rest of the state and in fact outperformed the national growth rate in two of the six bimonthlies. The more urban group maintained a positive growth rate throughout 1984. The other counties made positive gains in 1984 in all but two of the six bimonthly periods. The more rural counties had a decline of 1.8 percent in March-April and stalled in the Christmas months of November-December registering no gain for that period.

The trend has continued but the data does not provide a clear view of why the larger cities have recently done better than the smaller communities. It was hypothesized in the March *Review* that the difference was due mainly to the diversification of the larger communities' economies. However, other factors may be contributing. For example, some of the performance in the larger communities may be coming at the expense of the more rural communities. The citizens of the rural communities may be spending more of their income in the larger shopping areas and less in their home town. A closely related possibility focuses on the smaller business communities themselves. Are there fewer sales tax dollars being collected in the smaller towns because the business community is growing smaller? Are services in these communities disappearing? In an attempt to address these issues, the September *Business Review* article on the "Dual Economy" included a comment for consideration and a survey card for readers to complete and return. In addition to the comment for consideration, other explanations were presented for ranking and comment. The results of the survey follow the reprint of the comment for consideration.

Comment For Consideration:

It has been suggested that many of the businesses in the small South Dakota communities are or have been owned and operated by individuals that started their businesses following World War II and that many of these people are nearing or have reached retirement age. Further, as these individuals retire from their businesses, it is not

economically feasible for a younger person to purchase and operate them and the service that has been available in the community in the past disappears with the retirement of the owner.

Summary Of Survey Data

One hundred and twenty-five people responded to the questionnaire, and no fewer than one hundred and twenty-three people responded to each question. Caution must be taken in making inferences from the survey results. The survey was a nonrandom survey of the *Business Review's* readership and does not satisfy the statistical requirements to be considered representative of the state. Nonetheless, the survey results do identify community members' opinions of why young people are not taking over small town businesses.

The respondents were asked to identify the size of their community and to indicate if the number of businesses in their community had been decreasing, increasing or had been stable in the past three years. There was nearly equal representation in the respondent's experience. The representation among communities with increasing, stable and decreasing business communities was quite evenly distributed at 35%, 32% and 33%, respectively. The largest number of responses indicating a decreasing number of businesses were from the towns of 1,001 to 1,500 population. Sixty percent of the people responding from this group indicated that business numbers were decreasing. The two groups on either side of the leader were second and third in indicating declines. Fifty percent of the 501 to 1,000 population group indicated a decrease and forty-six percent of respondents from communities with populations of 1,501 to 2,500 indicated a decrease in business numbers in the past three years.

The communities that appear to have the greatest growth in business numbers are the larger communities. Over 55% of the respondents from the cities in the largest category, the cities with populations of over 5,000, indicated that business numbers were increasing. A significant portion of the next category, cities with populations of 2,501 to 5,000, also indicated a growing business community. Over 45% of the responses from that group indicated that business numbers were on the rise in the past three year time frame.

The responses from people living in the smallest of the cities, the 0 to 500 population group, had the largest percentage of responses indicating a stable number of businesses. Using business numbers as an indicator, the smallest of the South Dakota communities appears more stable than the cities with populations of 501 through 2,500. Fifty-seven percent of those responding from the small town group indicated a stable number of businesses. However, the results indicate a stable to decreasing business community with nearly 36% of the responses indicating their town had a declining business community and only 7% indicating one that was increasing.

One hundred and twenty-three people responded to the question regarding the comment for consideration. Fifty respondents or 41% of the people responding to the question agreed with the idea of services disappearing with the retirement of the World War II era businessman. An addi-

tional fifty-seven or 46% were in partial agreement with the comment or somewhat agreed. Combined, the supportive responses represent 87% of the total. Of the sixteen respondents disagreeing with the comment, twelve of them were from cities with a population of over 5,000 people and may have understood the question to be in reference to their large community.

Survey participants were asked to indicate the "main" reason that young people do not take over the businesses in the smaller communities. The responses given to chose from were as follows:

- ONE - Fewer people, farms are being consolidated.
- TWO - Farm community is stable in its numbers but is not buying because of credit pressures.
- THREE - Business patterns have changed. People are going to larger trade centers.
- FOUR - Young businessmen cannot make it because of high interest rates. Business opportunity would be adequate if rates were lower.
- FIVE - Other - Please Comment!

Responses to the question were divided into two groups; those that were single responses to the question and those that were multiple responses. The single response provides a greater degree of prioritization among the response choices. Table 3 contains a summary of the returns where the respondents gave a single response to the question.

TABLE 3

PRIMARY REASON YOUNG PEOPLE DO NOT TAKE OVER BUSINESSES
(Summary of Responses Where a Single Response was Given)

	Population 0-500	501-1000	1001-1500	1501-2500	2501-5000	Over 5000	Total RESPONSES
ONE	3	0	0	2	0	5	10
TWO	1	1	0	1	1	2	6
THREE	6	5	1	2	2	16	32
FOUR	3	1	3	3	1	9	20
FIVE	0	1	2	1	1	4	9
TOTAL RESPONSES	13	8	6	9	5	36	77

TABLE 4

PRIMARY REASON YOUNG PEOPLE DO NOT TAKE OVER BUSINESSES
(Summary of Responses where Multiple Responses were Given)

	Population 0-500	501-1000	1001-1500	1501-2500	2501-5000	Over 5000	Total RESPONSES
ONE	1	3	2	4	5	15	30
TWO	1	1	1	2	2	5	12
THREE	2	6	2	5	4	13	32
FOUR	2	6	3	3	5	10	29
FIVE	1	1	2	1	2	5	12
TOTAL RESPONSES	7	17	10	15	18	48	115

Multiple responses are summarized in Table 4. Both Groups identified changing business patterns, response three, as the main reason young people are not taking over businesses in the smaller communities. Agreement isn't as clear cut after the number one choice but it is interesting that the number one response is not tied to the poor farm conditions as one might suspect.

The single response group clearly identified high interest rates, response four, as the second most important factor affecting the young people's choice in not taking over a business in a small town. The decline in the population of the farm communities, response one, ranked a distant third in the ranking by this group.

The multiple response group did not provide as clear prioritization with their responses. While the change in business patterns did lead in response numbers, interest rates for young businessmen and the shrinking rural community scored almost an equal number of responses.

A weak but important tendency in the data is the relative importance of interest rates to business opportunity in the intermediate size towns. Interest rates appear more or less important in a relative sense as one looks across the size of city groupings. For example, responses in Table 3 suggest that interest rates play a more important relative role in determining business opportunity in the communities with a 1,001 to 1,500 population. A more thorough investigation would be necessary to determine if this size of town is in the position that interest is the most restrictive factor affecting business growth.

The statement, "Farm community is stable in its numbers but is not buying because of credit pressures," received the fewest number of responses from both groups. However, it is not clear if the low response is a result of the stable population portion of the question or the credit portion of the question. Further inquiry would be necessary to be certain. I suspect that the stable population portion of the statement was the cause of the limited response in that the consolidation of farms response did receive support.

The "Other" responses included comments about the general condition of the ag economy, five years of drought in the northeast, young people's lack of patience in saving for a business, and the high start up capital needs. One individual pointed out that the state is growing older and older people do not buy very much. A few stated that the listed reasons are all valid. They did not prioritize.

Summary Comment

There is support for the hypothesis that businesses in the smaller communities and the services they have provided are disappearing as World War II era businessmen retire. Eighty-seven percent of all people responding either agreed or somewhat agreed with the hypothesis. The exact meaning of the service loss to the consumers in the community wherein the service offerings are disappearing is not clear. The loss may mean doing without the service if it is one that can only be provided through a storefront in the community or the service may be provided in a limited fashion as an extension of a business from another town. Another possibility, one that received support in the survey, is that the service will be sought in the larger trade centers in the state. This change in market patterns could mean growth

(continued on page 12)

SOUTH DAKOTA INCOME AND EMPLOYMENT

TOTAL PERSONAL INCOME
United States, Plains Region and States
First Quarter 1983-Third Quarter 1984
(Millions of Dollars, Seasonally Adjusted at Annual Rates)

	1983				1984				% Change
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	3rd Qtr. 1984	3rd Qtr. 1983
United States	2,651,491	2,704,870	2,753,109	2,825,955	2,908,890	2,970,903	3,032,708	10.2	
Plains States	189,927	193,811	199,622	206,343	216,289	216,939	221,349	10.9	
Iowa	29,511	30,470	31,619	32,769	35,079	34,515	35,041	10.8	
Kansas	28,762	29,126	29,920	31,004	32,581	33,102	33,759	12.8	
Minnesota	47,396	48,693	50,005	51,390	53,275	54,364	55,682	11.4	
Missouri	52,620	53,730	55,115	56,616	58,682	59,597	60,628	10.0	
Nebraska	17,104	17,419	18,200	18,913	20,065	19,518	19,891	9.3	
North Dakota	7,740	7,663	7,880	8,472	9,008	8,279	8,680	10.2	
South Dakota	6,793	6,710	6,884	7,178	7,599	7,564	7,669	11.4	

Note: Detail may not add to totals because of rounding.

Source: U.S. Department of Commerce, Bureau of Economic Analysis

SOUTH DAKOTA NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
December 1983 and December 1984
(In Thousands)

				Average Weekly Hours		Average Hourly Earnings	
	Dec. 1983	Dec. 1984	% Change	Dec. 1983	Dec. 1984	Dec. 1983	Dec. 1984
Total Employment	234.6	238.3	1.6				
Mining	2.6	2.6	0.0				
Construction	7.7	7.7	0.0				
Manufacturing	26.6	27.8	4.5	42.6	43.0	\$6.89	\$7.32
Durable Goods	13.6	14.9	9.6	43.0	42.5	6.56	7.14
Fabricated Metals & Mach.	8.9	9.6	7.9				
Nondurable Goods	13.0	12.9	-0.8	42.2	43.7	7.25	7.53
Food & Kindred Products	7.7	7.4	-3.9				
Paper, Printing & Publishing	2.6	2.8	7.7				
Transportation & Pub. Utilities	12.3	12.3	0.0				
Transportation	6.9	7.1	2.9				
Communication & Pub. Utilities	5.4	5.2	-3.7				
Wholesale & Retail Trade	61.6	63.1	2.4				
Wholesale Trade	16.2	16.1	-0.6				
Durable Goods	7.0	6.8	-2.9				
Nondurable Goods	9.2	9.2	0.0				
Retail Trade	45.4	47.0	3.5				
Finance, Insurance & Real Estate	12.8	13.1	2.3				
Services	52.7	53.6	1.7				
Hotels, Amuse., Pers. & Business	13.2	13.1	-0.8				
Medical & Health	21.7	21.4	-1.4				
Educational, Membership & Social	14.9	16.3	9.4				
Government	58.3	58.1	-0.3				
Federal	10.2	10.5	2.9				
State	16.5	16.2	-1.8				
State Education	8.5	8.2	-3.5				
Local	31.6	31.4	-0.6				
Local Education	18.6	17.9	-3.8				

Source: South Dakota Department of Labor, "Labor Bulletin".

SOUTH DAKOTA AGRICULTURAL INDICATORS

SOUTH DAKOTA ANNUAL CROP PRODUCTION
SUMMARY
1982 - 1984
(000's Bushels)

Crop	1982	1983	1984
Wheat, All	98,530	89,729	126,038
Winter	36,300	51,750	61,200
Barley	3,480	2,079	3,128
Other Spring	58,750	36,400	61,710
Corn, Grain	193,680	104,410	186,260
Barley	23,433	23,100	30,345
Oats	123,540	79,200	86,800
Rye	4,680	8,740	10,800
Flaxseed	2,755	1,365	1,494
Soybeans	24,400	26,103	31,280
Sorghum, Grain	17,250	13,630	13,565
Sunflowers	659,980	450,450	633,480
Potatoes, Fall	1,350	2,310	1,820
Hay, All	7,610	7,592	8,083
Alfalfa	4,950	5,382	5,704
Other	2,660	2,210	2,379

Source: South Dakota Crop & Livestock Reporter.

PRICES RECEIVED BY FARMERS FOR COMMODITIES SOLD - SOUTH DAKOTA
December 1983 and December 1984

Commodity and Unit	Base Period Price 1910-1914 Average	Dec.		Dec. 1984 Price as % of Base	Dec. 1984 Price Above or Below Dec. 1983
		1983	1984		
Wheat Bu.	.85	3.59	3.38	198	-5.8
Corn Bu.	.51	3.03	2.50	490	-17.5
Oats Bu.	.35	1.72	1.64	469	-4.7
Barley Bu.	.59	2.28	1.88	319	-17.2
Flaxseed Bu.	1.68	6.01	6.04	360	.5
Milk, Whtl. Cwt.	1.82	-	-	-	-
Eggs Doz.	.196	-	-	-	-
Cattle Cwt.	5.24	54.60	52.60	1004	-3.7
Calves Cwt.	6.08	66.70	66.90	1100	3.4
Hogs Cwt.	7.07	42.50	48.20	682	13.4
Sheep Cwt.	4.24	17.20	19.70	463	14.5
Lambs Cwt.	5.60	58.10	61.80	1092	6.4
Wool Lb.	.178	.67	.58	326	-13.4

Season average price only.

Source: South Dakota Crop & Livestock Reporter

SOUTH DAKOTA LOCAL CONDITIONS INDICATORS

(% Change Like Period Previous Yr.)

City	Taxable Sales ¹		Telephone Services ²	Housing Starts ³	Postal Indicator ³	Employment ²
	Total	Retail				
Aberdeen	7.1	5.2	7.0	0.4	-40.7	-3.4
Belle Fourche	7.1	4.7	21.7	0.0	24.4	-3.1
Brookings	9.3	9.9	11.4	---	11.9	-3.7
Canton	12.3	13.9	10.2	-0.3	---	0.0
Chamberlain	9.8	5.0	16.8	1.1	---	9.6
Deadwood	3.5	1.8	8.5	-2.1	0.0	-1.2
DeSmet	1.6	2.2	17.1	-0.1	284.9	-1.8
Elk Point	0.6	-2.4	3.5	-2.0	---	-1.1
Hot Springs	11.6	10.5	36.9	---	407.2	-3.6
Huron	5.8	7.4	7.6	-0.7	-44.6	-8.9
Lead	-7.1	0.1	0.8	0.6	---	-1.2
Madison	10.4	2.9	10.8	-7.1	-25.2	-7.8
Milbank	0.9	3.1	9.2	0.6	-79.2	2.7
Mitchell	4.3	4.0	7.4	-0.7	56.8	-2.7
Mobridge	7.0	2.8	4.7	-0.6	181.6	-8.9
Pierre	6.8	9.1	9.3	2.3	47.4	-3.8
Rapid City	9.3	12.0	16.6	1.6	-21.2	-12.7
Sioux Falls	13.4	12.0	17.8	2.3	37.7	-1.5
Spearfish	11.5	14.7	12.7	---	---	-1.2
Sturgis	8.3	8.7	13.0	-0.6	---	-2.7
Vermillion	4.9	5.8	-0.7	-5.9	-41.2	4.4
Watertown	7.2	5.8	3.5	1.5	37.4	-2.2
Winnipeg	1.6	2.8	14.2	1.0	-59.0	6.5
Yankton	7.0	6.1	12.1	-0.9	165.1	-4.5

¹Based on County Data²Percentage change for January-December 1983 and 1984. Data reported for housing represents the value of housing starts.³Percentage change for Dec. 1983 and 1984. Telephone data are for the number of access lines in service.⁴Percentage change for fourth quarter 1983 and 1984. Included in postal indicators are: postage stock sales, postage meters for customers, permit imprint postage (3rd class regular), and second class postage.

Address Correction Requested

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CONSUMER PRICE INDEX

United States
Jan.-Dec. 1984
(1967=100)

Item	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Unadj. % Change Jan.-Dec. 1984
All items	305.2	306.6	307.3	308.8	309.7	310.7	311.7	313.0	314.5	315.3	315.3	315.5	3.4
Food & beverages	292.5	294.2	294.3	294.5	293.6	294.3	295.3	296.9	296.4	296.6	296.3	297.2	1.6
Food	300.2	302.1	302.2	302.3	301.4	302.0	303.2	304.8	304.2	304.4	304.1	305.1	1.6
Alcoholic beverages	219.9	219.9	220.7	221.3	221.5	222.4	222.5	222.9	223.1	224.2	223.8	223.9	1.8
Housing	329.6	331.0	331.5	333.2	334.6	336.2	338.1	339.5	341.4	341.2	340.9	341.2	3.3
Shelter	353.0	354.0	355.5	357.8	358.9	360.2	362.7	364.6	366.5	367.8	368.9	370.1	4.8
Renters' Costs	105.7	106.0	106.5	107.4	107.8	108.2	108.7	109.6	110.2	110.7	110.9	111.3	5.3
Homeowners' Costs	104.9	105.1	105.6	106.2	106.5	106.8	107.6	108.1	108.7	109.1	109.4	109.8	4.7
Fuel & Other Utilities	378.2	383.0	380.1	380.9	383.5	390.0	393.9	395.5	397.0	392.4	387.5	386.0	2.1
Fuel	473.2	479.6	475.2	476.0	483.5	490.7	496.5	498.6	500.1	492.1	482.6	480.2	1.5
Fuel oil, coal & bldg. gas	637.7	688.6	660.0	650.7	649.2	646.0	637.4	625.5	622.1	626.8	626.9	625.9	-1.9
Gas (piped) & electricity	431.9	429.0	429.5	432.3	441.4	450.6	457.1	463.9	466.4	456.0	444.7	442.2	2.4
Other util. & Pub. Services	224.6	228.0	227.4	228.2	228.8	229.4	230.6	231.3	232.7	232.9	234.4	234.1	4.2
Household furnishing	241.3	240.4	241.2	242.3	242.4	242.3	241.9	242.2	244.1	244.3	244.2	244.2	1.2
Apparel & upkeep	199.0	196.2	198.8	199.2	198.9	197.4	196.6	200.1	204.2	205.7	205.2	203.2	2.1
Transportation	306.7	305.8	306.9	309.6	312.2	313.1	312.9	312.9	313.7	315.5	316.1	315.8	3.0
Private transportation	301.7	300.8	301.9	304.8	307.4	308.1	307.5	307.5	308.4	310.2	310.8	310.4	2.9
Public transportation	378.2	377.4	377.4	377.1	379.8	385.2	389.3	390.8	389.5	391.1	391.8	392.8	3.9
Medical care	368.6	373.2	374.5	375.7	376.8	378.0	380.3	381.9	383.1	385.5	387.5	388.5	5.4
Entertainment	250.9	251.5	251.7	253.8	253.5	254.5	255.3	256.4	257.3	258.3	259.0	260.1	3.7
Other goods and services	299.8	301.5	302.1	302.8	303.2	304.4	306.5	307.2	314.6	315.8	316.5	316.7	5.6

*Consumer Price Index for all Urban Consumers

Source: Bureau of Labor Statistics, U.S. Dept. of Labor

(continued from page 9)

in retail sales to the cities that are able to attract this new market.

The leading response in the survey explaining why young people do not take over businesses in the smaller communities is that people are going to the larger trade centers to do their shopping. It appears that the mobility of the consumer explains at least part of the lackluster sales tax performance in the smaller communities. The response also supports the idea that part of the larger communities' growth has been at the expense of the smaller communities.

The greatest percentage of responses indicating that their business communities were declining were given by people from communities of 1,001 to 1,500 in population. That same group identified interest rates as a key factor affecting the ability of young people to purchase and operate existing businesses. Further investigation would be needed

to determine if the interest rates are the most limiting factor or if other influences are more important. The number one response, changing business patterns, may be the factor limiting business opportunities in these communities. A course of action is to identify the factors limiting a communities' development and determining if those factors are controllable.

The individual business enterprise could gain assistance in developing a business plan through the Small Business Development Center (SBDC) located in the School of Business on the campus of the University of South Dakota. The SBDC can assist in reviewing factors that you control as a businessperson and demonstrate on the bottom line the impact of making changes in these areas. There is no charge for initial consultation. If you are interested, you can contact a representative of the SBDC by calling 677-5272.

SOUTH DAKOTA

BRB

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ERRATA

Corrected figures for the Employment section located in the "South Dakota Local Conditions Indicator's" table on page 11 of the March 1985 issue of the South Dakota Business Review are as follows:

<u>City</u>	<u>Employment*</u>
Aberdeen	3.5%
Belle Fourche	3.2
Brookings	3.8
Canton	0.0
Chamberlain	-8.8
Deadwood	1.2
DeSmet	1.9
Elk Point	1.1
Hot Springs	3.7
Huron	9.7
Lead	1.2
Madison	8.5
Milbank	-2.6
Mitchell	2.8
Mobridge	9.7
Pierre	3.9
Rapid City	14.5
Sioux Falls	1.5
Spearfish	1.2
Sturgis	2.8
Vermillion	-4.2
Watertown	2.3
Winner	-6.1
Yankton	4.7

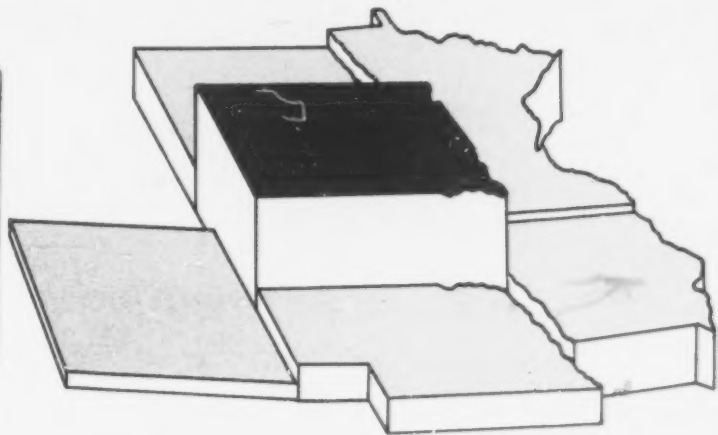
*Based on county data. Figures above represent percentage change for December 1983 and 1984.

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SOUTH DAKOTA Business Review

June 1985
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Published by Business Research Bureau, The University of South Dakota

		SOUTH DAKOTA			UNITED STATES		
General Indicators	Latest Quarter	Latest Quarter	Year Ago	Percent Change	Latest Quarter	Year Ago	Percent Change
Personal Income (\$ Mil.)	1984-4	8,068	7,177	12.4	3,086,435	2,827,017	9.2
Farm Prop. Income (\$ Mil.)	1984-4	808	510	58.4	25,577	16,652	53.6
Non-ag Employment (Thous.)	1985-1	239	237	0.8	96,246	92,765	3.8
Unemployment Rate (%)	1985-1	6.0	5.2	15.4	7.8	8.4	-7.1
Total Employment (Thous.)	1985-1	316	311	1.6	104,934	102,000	2.9

Note: All U.S. data seasonally adjusted except for the unemployment rate and total employment. For South Dakota data only personal income and farm proprietors' income are seasonally adjusted.

SOUTH DAKOTA'S TAX BURDEN: AN UPDATE

Raymond J. Ring

An article in this *Review* two years ago described South Dakota's tax burden and compared it to South Dakota's past tax burden and to the burden in surrounding states.¹ It is now possible to update that article, to see whether South Dakota taxes followed earlier trends and how (or whether) the state's burden has changed relative to that of other states.

The new data are for fiscal years 1982 and 1983, a period continued cuts in federal aid, a very deep recession, and substantial drops in inflation. These forces dramatically cut governments' ability to meet their citizen's needs,

About the author: Dr. Raymond J. Ring is Associate Professor of Economics at the School of Business, The University of South Dakota, Vermillion, South Dakota. Russell Guindon, a recent graduate of The University of South Dakota, assisted with data collection and analysis.

resulting in deficits in some states, very low surpluses in others, and many changes in tax rates and spending levels. Thus, there was considerable opportunity for changes in states' relative positions during the time period of this update. The more recent data may also give some hints about how governments reacted since 1983 as the economy recovered but federal aid was cut even more.

As Table 1 shows, total South Dakota state and local revenues rose in 1982 and 1983, continuing a long-standing trend.² This should come as no great surprise in light of the fact that inflation also continued in those years, albeit at a slower pace. If tax burdens in different years are to be accurately compared, account must be taken of price changes. Figure 1 shows South Dakota taxes adjusted for (continued on page 4)

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TREND OF BUSINESS

The U.S. Economy at Midsummer

The U.S. economy turned soft in early 1985 with real GNP increases slowing to an anemic 0.7 percent annual rate in the first quarter of 1985. Second quarter predictions are running at 2.5 percent. While the overall economy has slowed such sectors as the automotive sector and residential housing are experiencing some strength while domestic manufacturing and capital spending are lagging. Accompanying this slowdown we have seen a dramatic drop in interest rates. The prime rate has fallen below 10 percent for the first time since 1978. The whole spectrum of interest rates has dropped at least 1 percentage point since late 1984. This drop in interest rates should help spur housing and capital expenditures in 1985 and 1986.

After a slow start, the U.S. economy is expected to pick up steam in the second-half of 1985. According to Robert J. Eggert of Blue Chip Economic Indicators real GNP in 1985 will be 2.9 percent above 1984. While this is slower than the historical growth rate of 3 to 3.5 percent, it indicates that there will be no recession in 1985. The inflation outlook remains good with projected inflation for the Consumer Price Index of 3.7 percent for 1985. The unemployment rate is not expected to change much with the current 7.3 percent dropping to 7.2 percent by late 1985. Overall, 1985 will be a year of slower growth for the U.S. economy.

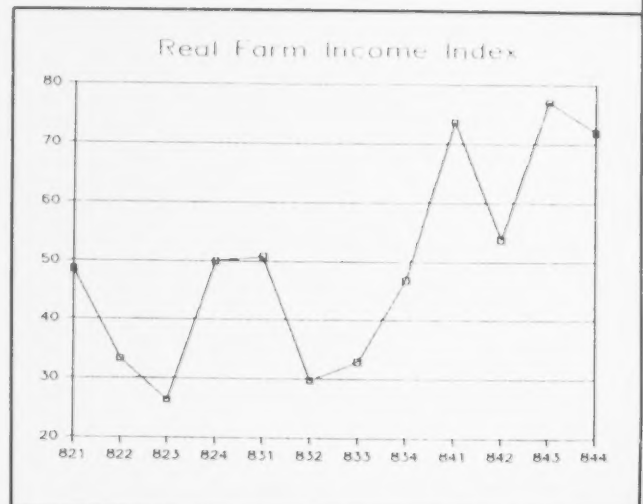
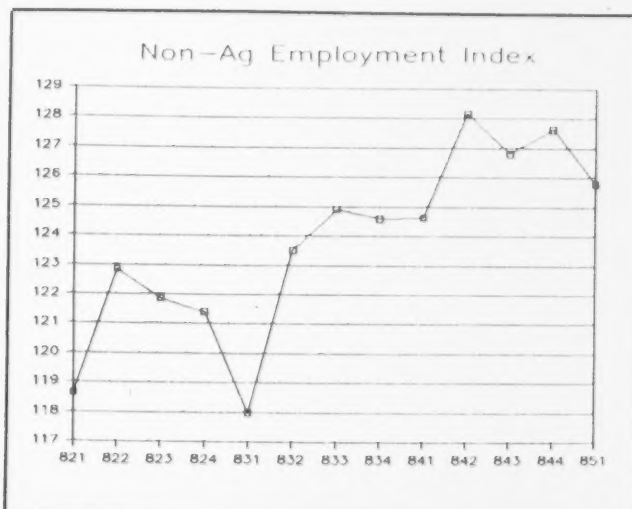
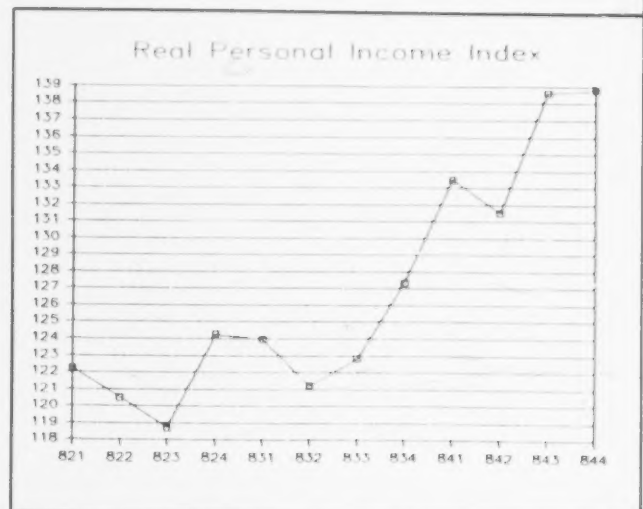
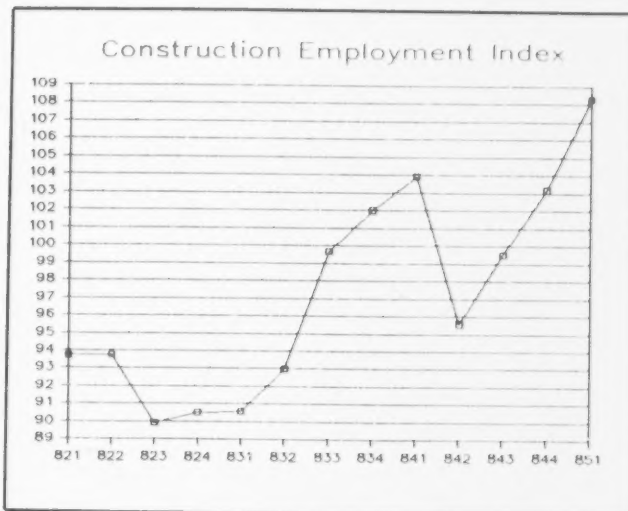
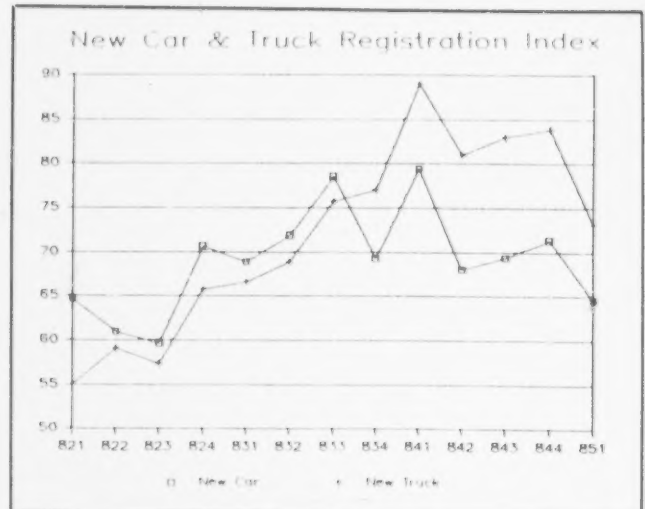
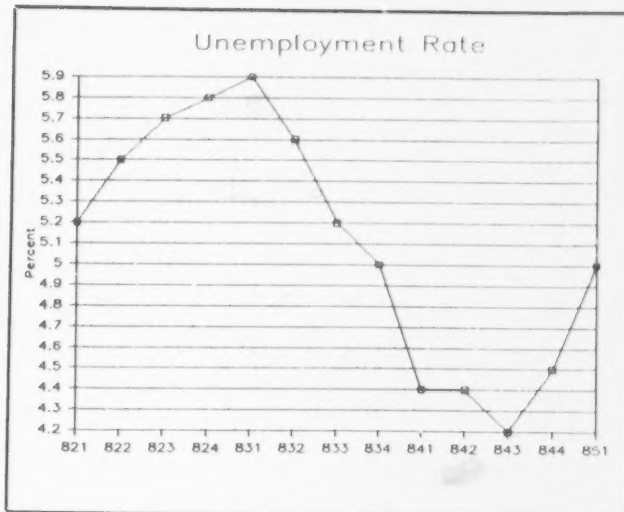
South Dakota Economy

Unemployment in South Dakota increased slightly more than 11 percent in the first quarter of 1985 compared to the fourth quarter of 1984. Comparisons to a year ago show an increase of nearly 14 percent on a seasonally adjusted basis.

In the employment sector construction employment continued to expand with a 5 percent increase in the first quarter of 1985 compared to the previous quarter. There has been continued growth in this indicator since the second quarter of 1984. During the 1983-84 period, the fastest job growth areas in the employment sector were in services, manufacturing and finance, insurance, and real estate (FIRE). Expansion of banking activities in Sioux Falls contributed to this increase in the FIRE area. Employment gains in this area continued into the first quarter of 1985 with a 4 percent increase over the first quarter of 1984. Services grew slightly more than 2 percent in the first quarter of 1985 compared to this period a year ago. Non-agricultural employment dipped slightly in the first quarter of 1985 compared to the previous quarter. In "District Economic Conditions" published by the Federal Reserve Bank of Minneapolis the outlook for nonfarm employment in 1985 and 1986 is for moderate growth (3.4 percent in 1985 and 4.6 percent in 1986).

(continued on page 4)

SOUTH DAKOTA BUSINESS & ECONOMIC INDICES
Quarterly Date 1982-1985
Adjusted for Seasonal Variation



(South Dakota's Tax Burden; continued from page 1)

South Dakota's personal income increased slightly (0.1 percent) in the fourth quarter of 1984 compared to the previous quarter but showed strong growth over this period a year ago (9.0 percent).

Farm income in South Dakota declined nearly 7 percent in the fourth quarter of 1984 compared to the third quarter but rebounded from a year ago with a 53.6 percent increase.

Sales of new cars and trucks dropped off in the first quarter of 1985 compared to the previous quarter. On a seasonally adjusted basis, new car sales declined nearly 10 percent while sales of new trucks dropped nearly 13 percent.

The following table provides quarterly comparisons of the indicators of business activity maintained by the Business Research Bureau.

SOUTH DAKOTA BUSINESS INDICES

1983 - 1985, Quarterly

Seasonally Adjusted

(1972 = 100)

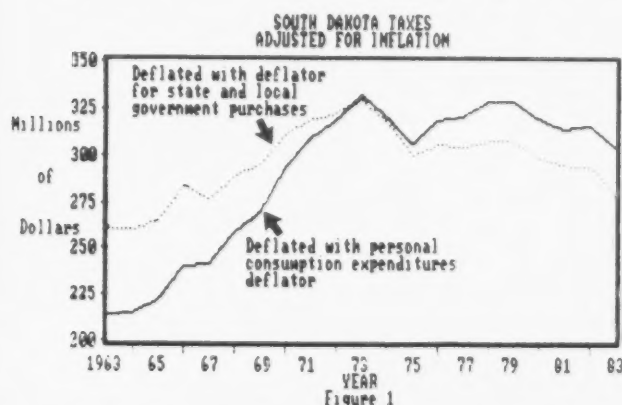
	1983	1984	1985
	4th Qtr	1st Qtr	2nd Qtr
Personal Income	127.3	133.5	131.5
Farm Proprietors' Income	46.8	73.7	53.7
Non-Ag Employment	124.6	124.6	128.2
Unemployment Rate (%)	5.0	4.4	4.4
Construction Employment	102.0	103.9	95.6
New Cars	69.3	79.4	68.0
New Trucks	77.0	89.0	80.9

(Trend of Business; continued from page 2)

inflation in two different ways. One way (using the personal consumption expenditures deflator) gives a measure of changes in purchasing power given up by taxpayers when they pay taxes; the other method measures changes in government ability to buy goods and services with those taxes.³ By either measure, the real value of South Dakota state and local taxes has continued the downward trend that started several years ago.

Table 1
Revenues of South Dakota
State and Local Governments

Fiscal Year	Total Revenues (millions of dollars)		Taxes per Capita		Taxes per \$1000 Personal Income	
	General	Own Source	Amount	Net 1 Bank	Amount	Net 1 Bank
1963	248.5	200.7	158.6	223.96	25	111.35
1964	267.0	205.8	162.0	226.56	28	116.54
1965	284.6	214.3	169.2	240.71	31	126.00
1966	299.5	234.6	188.0	275.62	28	123.82
1967	322.9	250.7	193.8	287.60	27	117.98
1968	358.6	275.1	218.7	326.75	23	123.02
1969	390.6	301.0	232.5	352.60	24	123.21
1970	433.5	340.9	265.2	398.12	24	132.94
1971	483.9	380.7	291.7	435.32	22	138.36
1972	533.1	417.6	313.1	461.15	25	134.90
1973	596.4	439.8	339.2	495.84	27	135.01
1974	646.3	467.7	353.9	518.91	30	109.60
1975	688.9	497.6	370.8	542.86	33	116.05
1976	763.4	548.4	409.1	596.32	33	121.57
1977	820.4	601.5	433.6	629.35	35	123.47
1978	905.0	654.0	471.0	683.00	38	115.00
1979	981.5	713.0	510.0	740.14	41	107.75
1980	1106.7	790.9	544.1	788.55	37	105.92
1981	1180.0	851.7	587.0	849.81	38	108.55
1982	1268.3	946.1	633.0	916.11	39	104.53
1983	1311.4	987.3	639.8	913.61	41	95.81



Adjusting for inflation shows that another trend first pointed out in the earlier article continued in 1982 and 1983. Because prices of government-provided goods and services rose more rapidly than did the cost of consumer

goods, governments' purchasing power fell more (in real terms) than did real tax burdens. South Dakota taxes adjusted for taxpayers' purchasing power fell by 3% between 1981 and 1983 while taxes adjusted for governments' purchasing power fell by over 5%. Since the 1973 peak in tax burdens, taxpayers' burden has fallen by 8.3% while governments' purchasing power has fallen by 15.3%.

Closer inspection of Table 1 reveals one significant shift from earlier trends. Federal aid to state and local governments ("total general revenue" minus "own source revenue") fell from \$328.3 million in 1981 to \$302.2 million in 1982, then rose to \$324.1 million in 1983. Thus, federal aid --in nominal terms-- was lower in 1983 than in 1981, even though prices rose during that time. In real terms (adjusting with the index for state and local purchases of goods and services), federal aid was 14% lower in 1983 than in 1981. What is more, real total general revenue fell in 1981, for the first time since 1974, and continued to fall in 1982 and 1983. By 1983, South Dakota state and local governments' ability (using all revenue sources) to buy goods and services was 6% below its 1980 peak.

Another way to compare tax burdens over time is to look at taxes paid in relation to taxpayers' incomes. Figure 2 shows taxes per \$1,000 personal income in South Dakota over the last 20 years. This measure of tax burdens also continued to fall in 1982 and 1983, as South Dakota personal income rose more rapidly than taxes. While personal income was rising by 10.5% between 1981 and 1983, total taxes were rising by 8.9%.

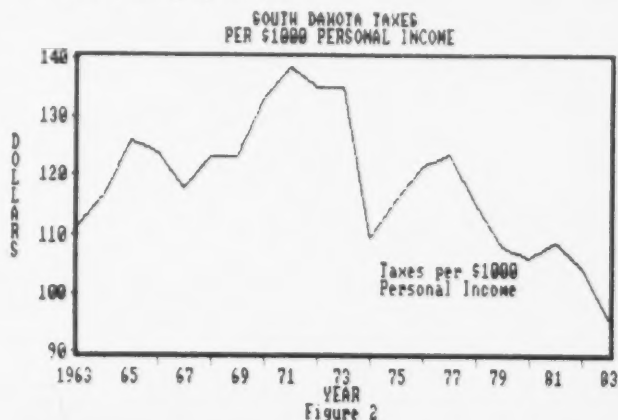


Table 2 contains data on state and local taxes per capita and per \$1,000 personal income for the United States, South Dakota, and the six bordering states. It shows that South Dakota's tax burden has not only fallen relative to its own past burden but also relative to other states in the Union. Between 1980 and 1983 this state's per capita tax burden fell from 80% of the national average to 75% of the national average and tax per \$1,000 personal income fell from 91% of the U.S. average to 86% of the U.S. average. South Dakota retained its position of lowest per capita tax burden in the region and fell to lowest in taxes per \$1,000 personal income. Taxes per \$1,000 personal income rose in three of the six contiguous states, even as the national average of this measure was falling.

Table 2
Taxes Per Capita and Per \$1000 Personal Income,
South Dakota and Surrounding States

	1965	1970	1975	1980	1983
	Amount Rank	Amount Rank	Amount Rank	Amount Rank	Amount Rank
Per Capita					
U.S.	264 --	427 --	664 --	987 --	1216 --
SD	241 31	198 24	543 33	789 37	914 41
Iowa	276 16	436 16	637 21	967 23	1171 20
Rinn.	299 7	442 15	754 8	1125 8	1473 4
Mont.	265 22	398 25	612 26	1000 16	1179 19
Nebr.	220 38	356 26	577 28	963 24	1146 23
ND	248 26	376 28	613 25	847 29	1109 27
Wyom.	278 15	414 17	697 15	1199 3	1443 2
Per \$1000 Personal Income					
U.S.	104 --	117 --	123 --	116 --	111 --
SD	126 8	133 7	116 29	106 32	96 42
Iowa	116 17	125 16	121 18	111 26	109 21
Rinn.	127 2	125 15	119 6	127 8	132 4
Mont.	118 23	127 9	126 14	130 7	126 7
Nebr.	93 42	112 27	110 34	111 27	108 24
ND	118 24	125 13	119 35	102 40	103 31
Wyom.	113 19	114 5	114 9	148 3	202 2

Precisely comparable data for total state and local taxes in more recent periods are not yet available, but partial data from various sources give some clues to what has happened more recently. State tax revenues rose by 14.8% nationally between 1983 and 1984, but by only 10.5% in South Dakota.⁴ (This relationship is to be expected during an economic recovery, since South Dakota depends so

heavily on sales and excise taxes that are much less sensitive to economic conditions than are other types of taxes.) Property taxes (which account for most local taxes) rose by about 7% nationally between 1983 and 1984 and by about 9% in South Dakota.⁵ During the same time, personal income rose by 9.7% in the U.S. and by 13.1% in South Dakota, and prices rose by 3.2%. Thus, it would appear that real tax revenues rose in the U.S. and in South Dakota between 1983 and 1984, and that taxes per \$1,000 personal income probably rose slightly in the U.S. as a whole but fell in South Dakota. For 1985, the situation may be somewhat different. South Dakota state taxes rose considerably, beginning in the second half of 1984, because of rate increases and acceleration of revenues due to changes in collection schedules.

FOOTNOTES

¹ Raymond J. Ring, "South Dakota's Tax Burden: A Closer Look," *South Dakota Business Review* 41, no. 4 (May 1983), pp. 2-4, 6-7.

² For explanation of the headings of the columns in Table 1 and for comparable data back to 1963, see *ibid.*, pp. 2-4.

³ The data used for making these adjustments are explained in *ibid.*, pp. 2-3.

⁴ U.S. Department of Commerce, Bureau of the Census, *State Government Tax Collections in 1984*, p. 2. These data are for fiscal years. All other figures in the paragraph are for calendar years.

⁵ U.S. Department of Commerce, Bureau of the Census, *Quarterly Summary of Federal, State, and Local Tax Revenue*, October-December 1984, p. 7 and South Dakota Department of Revenue, *Annual Statistical Report FY 1983 and Annual Statistical Report FY 1984*.

⁶ U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, April 1985, pp. 39 and S-1.

SOUTH DAKOTA RANKS

DeVee Goss

How does South Dakota rank when compared to the other 49 states? Below is a summary of how our state ranks on significant selected subjects. For more information on these or other rankings, contact the State Data Center at 677-5287.

Income and Employment	Rank
Average Annual Pay, 1983: \$13,188	50
Money Income Per Capita, 1981: \$6,811	48
Personal Income Per Capita, 1983: \$9,704	38
Civilian Unemployment Rate, 1983: 5.4%	49

About the author: DeVee Goss is a census analyst at the Business Research Bureau and Instructor of Accounting at the School of Business, The University of South Dakota, Vermillion, South Dakota.

Civilian Employment, Percent Change, 1982-83: 1.29% 23

Agriculture

Average Value of Farm Land and Buildings Per Acre, 1984: \$263	45
Farms - Percent with Sales of \$100,000 or More, 1982: 16.5%	16
Farm Marketings, 1983: \$2,586 (mil. dol.)	24
Total Crop Land, 1982: 18,838,739 Acres	9
Harvested Crop Land, 1982: 14,433,490 Acres	8
Expenses for Energy and Petroleum Products, 1982: \$256,668,000	14

(continued on page 6)

(continued from page 5)

Interest Expense Reported, 1982: 13
\$296,609,000

Demographics

Resident Population, 1984 estimate: 44
706,000

Percent Change 1980-84: 2.2% 33

Percent of Population 65 years old 6
and over, 1983: 13.6%

Percent of Population under 18 years 9
old, 1983: 29.1%

Percent of Population in Metro. Area, 49
1983: 16.3%

Birth Rate, 1982: 18.5 10
(Rate per 1000 population)*

Govenment

Federal Aid to State and Local 7
Government, Per capita, 1983: \$516

Public Aid Recipients as Percent of 39
Population, 1983: 3.5%

State and Local General Revenue 31
Per Capita, 1982: \$1,835

State and Local Employees Per 10,000 18
Population, 1983: 482.6

Average Public Elementary and 49
Secondary School Teacher Salaries,
1984: \$16,480

Miscellaneous

Physicians Per 100,000 Population, 47
1981: 116

Hospital Beds Per 100,000 Population, 2
1982: 818

Crime Rate Per 100,000 Population, 49
1983: 2,548

Adults Under Correctional Supervision 45
Per 100,000 Population, 1982: 59

New Housing Units Started, 1983: 2900 48

SCHOOL OF BUSINESS

RESEARCH AND PUBLICATIONS

1983 - 1985

Brown, Ralph, and Johnson, Dennis. *Wrongful Death and Personal Injury: Economics and the Law*, SOUTH DAKOTA LAW REVIEW, Vol. 259, Winter, 1983.

Brown, Ralph, and Johnson, Jerry W. *Perspective 1983 - Outlook 1984*, SOUTH DAKOTA BUSINESS REVIEW, vol. XLII, No. 3, March, 1984.

Brown, Ralph. *Implicit Inflation and Interest Rates in Discounting Personal Injury Losses to Present Value*, JOURNAL OF RISK AND INSURANCE (Accepted and forthcoming).

Fisher, Philip C. *Needs Assessment for Career Development*, in HUMAN RESOURCE DEVELOPMENT Francis Ulschak, Reston Publishing Co., Reston, Virginia, 1983.

Fisher, Philip C. *Fifteen Year European Business and Economic Study Tour*, with Benno Wymar and Galen Hadley; SOUTH DAKOTA BUSINESS REVIEW, Vol. XLIII, No. 3, March, 1985.

Fisher, Philip C. *Cases: Daktonics, Inc.*, with Charles Roegiers, published in 1984 ANNUAL ADVANCES IN BUSINESS CASES; Charles F. Donds, ed.; Midwest Casewriters Association and DePaul

University; Chicago, Illinois, 1985.

FUNDAMENTALS OF STRATEGIC MANAGEMENT; Fred R. David, Charles E. Merrill Publishing Co.; Columbus, Ohio (expected date, January, 1986).

Wall Drug, 1983, with Robert L. Johnson and James Taylor, published in BUSINESS STRATEGY AND POLICY; Gary D. Smith, Danny R. Arnold, and Bobby G. Bizzell; Houghton Mifflin Co.; Boston, Massachusetts, 1985.

STRATEGIC MANAGEMENT; Robert A. Cemerford and Dennis W. Callaghan; Kent Publishing Co.; Boston, Massachusetts, 1985.

STRATEGIC MANAGEMENT; Arthur Sharplin; McGraw-Hill Book Co.; New York, 1985.

Iowa Beef Processors, Inc. (A, B, C, and D), with Gregory Gullickson and Bernard Perkins, published in BUSINESS POLICY: ADMINISTRATIVE STRATEGIES AND CONSTITUANCY ISSUES; Curtis Tate and Marilyn Taylor; Business Publishing Co.; Plano, Texas, 1983.

Iverson, Gene. finished a year's leave of absence, during which time he worked in research with Abbot Lab-

oratories in Chicago. He returned to U.S.D. as Director of the Business Placement Bureau in August of 1984.

Iverson, Gene B. *On Forecasting with Unstable Autoregressive Processes*, with David Moen and Diego Salazar, National Conference, PROCEEDINGS, American Institute of Decision Sciences, Toronto, Canada, November, 1985.

Johnson, Dennis A. *Determining Appropriate Costs for Pricing in the Restructured Telecommunication Industry*, JOURNAL OF ECONOMICS, December, 1983.

Johnson, Dennis A. *Opportunity Cost: A Pedagogical Note*, SOUTHERN ECONOMIC JOURNAL, January, 1984.

Dennis Johnson is also Business Editor of the JOURNAL OF ECONOMICS.

Kaufman, Charles N. Professor of Management and Dean of the Graduate School, presented two papers at national meetings during this time period: *Slaying the Medusa: A Market Management Approach to Summer Session*, presented to the North American Association of Summer Sessions, in New Orleans, in November of 1983; and *The Budget as a Cutback Management Tool: Pitfalls and Traps for the Academic Administration*, presented to the National Conference on Faculty Evaluation and Development, in Orlando, Florida, in January of 1984. Published in CONFERENCE PROCEEDINGS, ISSUES IN HIGHER EDUCATION, Volume XIV, 1984. Dean Kaufman has also done a manuscript review for Holt, Rinehart, & Winston, for PERSONNEL MANAGEMENT, Summer, 1985.

Moen, David H. *Testing for a Change in the Regression Matrix of a Multivariate Linear Model*, with Lyle Broemeling, COMMUNICATIONS IN STATISTICS, Volume A13, Number 12, 1984.

Moen, David H. *Structural Changes in Multivariate Regression Models*, with Lyle Broemeling and Diego Salazar, COMMUNICATIONS IN STATISTICS, Volume, A14, Number 8, 1985.

Moen, David, H. *The Uncertainty of Forecasting: Models with Structural Change Versus Those Without Changing Parameters*, with Lyle D. Broemeling, to appear in COMMUNICATIONS IN STATISTICS, 1985.

Peterson, James M. (co-authored with Gene Murdock, University of Wyoming). *Strict Liability in Tort for Advertising Agencies*, JOURNAL OF ADVERTISING, Winter 1983.

Powell, John E. *A Workshop on SAS/OR and SAS/ETS*, with David Moen, National AIDS, American Institute for Decision Sciences, Toronto, Canada, November, 1984.

Powell, John E. *Security and Controls in a Micro- and Minicomputer Environment*, with Karen Jonas and Kathryn Nordstrom, June, 1985.

Preheim, Randall L. co-editor, PRACTICING PUBLIC MANAGEMENT: A CASEBOOK OF PROBLEMS AND SITUATIONS, St. Martin's Press, Inc., New York, 1983.

Ring, Raymond J., Jr. *Tax Exporting and Importing*, SOUTH DAKOTA BUSINESS REVIEW, Vol. 42, No. 1, August, 1983.

Ring, Raymond J., Jr. *The Effects of Use Value Assessment on County and School District Revenues and on State Aid to Education*, PROPERTY TAX JOURNAL, December, 1983.

Ring, Raymond J., Jr. *A State Corporation Income Tax: Tax Exporting and the Allocation Formula*, GROWTH AND CHANGE, July, 1984.

Ring, Raymond J., Jr. *The Effect of Permanent Income on Retail Sales by Sales Category*, QUARTERLY JOURNAL OF BUSINESS AND ECONOMICS, Autumn, 1984.

Ring, Raymond J., Jr. *The Variability of Inflation and Income Across Income Classes*, SOCIAL SCIENCE QUARTERLY, March, 1985.

Roegiers, Charles L. *Business Ethics in a Small Town*, BUSINESS UPDATE, June, 1983.

Roegiers, Charles L. *Learning by Doing Really Does Work*, paper delivered at the annual conference of the Midwest Division of the Academy of Management, in South Bend, Indiana, April, 1984.

Roegiers, Charles L. *Management Class - A Follow-up in the Real World*. Western AIDs, American Institute of Decision Science, Monterey, California, March, 1985.

Salazar, Diego, and Powell, John E. presented a seminar for a group of business people in Bogota, Columbia, in February 1984. Also participating in the seminar was Dr. Richard LaRue, formerly of the U.S.D. Computer Center.

Skaret, David J., MBA/AFIT Program. *Leadership Substitutes and Neutralizers: Are They a Myth or a Reality?* with N. S. Bruning. Under review for the 1985 Annual Meeting of the American Institute for Decision Sciences.

(continued on page 8)

(continued from page 7)

Salazar, Diego. *Structural Changes in Time Series Models*, JOURNAL OF ECONOMETRICS, 1982, pp. 147-163.

Taylor, James D. *Elliott White Springs, Maverick Ad Leader*, JOURNAL OF ADVERTISING, Vol. II, No. 2, 1982, and In *Marketing Abstract* section of JOURNAL OF MARKETING, Spring, 1984.

Verschuur, L. L. *Interest Rates and Home Prices*, SOUTH DAKOTA BUSINESS REVIEW, November, 1983.

Williamson, Terrence E., MBA/AFIT Program. Contributor to: THE 20-YEAR STRATEGIC OUTLOOK FOR THE U.S. LIFE AND HEALTH INSURANCE INDUSTRY, Center for Futures Research, Graduate School of Business Administration, University of Southern California, 1984.

*Those co-authors whose names are underlined are also faculty members in the School of Business.

This list does not include unpublished research projects completed with the Business Research Bureau.

SOUTH DAKOTA LABOR MARKET MODEL FORECAST HIGHLIGHTS

The latest South Dakota Labor Market model forecasts slight growth in real terms for the various indicators of economic activity. For the year, personal income is expected to average 1.7 percent, while nonfarm personal income is projected to increase 1.8 percent. Total employ-

ment is projected to grow only 0.4 percent, with nonfarm employment rising 2.4 percent. The South Dakota unemployment rate is expected to average 5.0 percent for the year, up slightly from 1984's 4.4 percent rate. Additional comparisons are available in the following table.

SOUTH DAKOTA FORECAST SELECTED ECONOMIC INDICATORS											
DESCRIPTION	1984.4	1985.1	1985.2	FORECAST DATA				ANNUAL DATA			
South Dakota Indicators				1985.3	1985.4	1986.1	1986.2	1986.3	1984	1985	1986
Personal Income (Millions)	7668.9	7879.3	8069.6	8197.1	8404.1	8529.8	8714.6	8830.0	7625.2	8137.6	8773.3
(% Change)	-0.0	10.8	9.5	6.3	10.0	5.9	8.5	5.3	10.7	6.7	7.8
Personal Income (1972 \$s)	3440.5	3454.3	3507.0	3527.2	3579.3	3586.9	3629.3	3636.7	3459.7	3517.4	3631.3
(% Change)	-2.5	1.6	6.1	2.3	5.9	0.9	4.7	0.8	7.2	1.7	3.2
Nonfarm Pers. Inc. (Millions)	7148.1	7264.1	7463.1	7594.8	7778.3	7875.6	8060.7	8167.2	7042.5	7524.6	8107.9
(% Change)	0.4	6.0	10.8	6.9	9.4	4.7	9.3	5.0	9.0	6.8	7.8
Nonfarm Pers. Inc. (1972 \$s)	3206.9	3184.6	3243.4	3268.0	3311.9	3311.8	3357.2	3362.1	3195.3	3252.5	3355.9
(% Change)	-2.1	-3.2	7.3	3.0	5.3	-0.4	5.4	0.5	5.6	1.8	3.2
Wage and Salaries (Millions)	3626.6	3656.4	3768.7	3823.3	3925.2	3993.0	4089.7	4141.2	3555.6	3793.4	4118.1
(% Change)	6.5	3.3	12.1	5.8	10.5	6.8	9.6	5.0	8.5	6.7	8.6
Wage and Salaries (1972 \$s)	1627.0	1603.0	1617.8	1645.1	1671.7	1679.1	1703.3	1705.6	1613.3	1639.7	1704.5
(% Change)	4.0	-5.9	8.6	1.8	6.4	1.8	5.7	0.5	5.2	1.6	4.0
Farm Income (Millions)	534.6	628.9	620.0	615.6	641.0	667.2	666.3	679.6	596.1	626.4	678.2
(% Change)	-4.5	59.3	-2.7	-0.3	15.5	18.3	1.4	8.4	34.4	5.1	8.3
Farm Income (1972 \$s)	239.8	275.7	269.5	264.9	273.0	280.6	277.5	279.9	270.5	270.7	280.7
(% Change)	-7.0	50.1	-6.2	-4.3	11.4	13.2	-2.5	3.9	30.3	0.1	3.7
Total Employment (Thousands)	321.4	315.8	313.4	345.7	328.8	314.8	340.7	352.1	329.5	331.0	335.7
(% Change Year Over Year)	0.4	1.6	-2.2	0.3	2.3	-0.3	2.2	1.8	4.3	0.4	1.4
Nonag. Employment (Thousands)	245.4	239.7	252.0	255.5	254.4	249.3	261.3	263.7	244.4	250.4	259.1
(% Change Year Over Year)	1.6	1.3	1.3	3.5	3.6	3.9	3.6	3.2	3.9	2.4	3.5
Manufacturing Employment	28.1	27.4	28.4	29.3	30.1	30.2	31.0	31.8	28.4	28.8	31.4
(% Change Year Over Year)	2.2	-0.5	1.3	9.5	7.1	10.2	9.4	8.8	9.6	1.4	9.1
Unemployment Rate (%)	4.6	6.0	4.6	4.6	4.9	6.3	5.1	4.7	4.4	5.0	5.3
U.S. INDICATORS											
Real GNP (1972 \$s)	1664.8	1680.8	1697.5	1712.6	1726.1	1737.3	1747.4	1755.6	1639.9	1704.2	1751.5
(% Change)	4.7	3.8	4.0	3.5	3.1	2.6	2.3	1.9	6.9	3.9	2.8
GNP Deflator (1972 = 100)	226.1	228.1	230.1	232.4	234.8	237.4	240.1	242.8	223.4	231.3	241.5
(% Change)	2.7	3.5	3.5	4.0	4.1	4.4	4.5	4.5	3.8	3.6	4.4
Pers. Cons. Def. (1972=100)	222.9	228.1	230.1	232.4	234.8	237.8	240.1	242.8	220.4	231.3	241.6
(% Change)	2.5	9.2	3.5	4.0	4.1	5.1	3.9	4.5	3.2	5.0	4.4
Cons. Price Index (1967=100)	315.4	317.8	320.6	323.9	327.4	331.1	335.0	339.0	311.1	322.4	337.0
(% Change)	2.8	4.0	3.5	4.1	4.3	4.5	4.7	4.7	4.3	3.6	4.5
Unemployment Rate (%)	6.7	7.2	7.1	7.0	7.0	7.0	7.0	7.0	7.0	7.1	7.0
Treasury Bill Rate (91 Day)	7.9	8.1	8.4	8.7	8.8	8.9	8.9	8.7	10.7	8.5	8.7
BRB, UNIVERSITY OF SOUTH DAKOTA *** FORECAST *** APRIL 1985											

TAXABLE SALES COMPARISONS BY POPULATION SIZE
(Population according to 1980 Census figures)

	<u>Total Population</u>	<u>Jan.-June</u>		<u>%</u>	<u>July-Dec.</u>		<u>%</u>	<u>Jan.-Dec.</u>
		<u>1983</u>	<u>1984</u>	<u>Change</u>	<u>1983</u>	<u>1984</u>	<u>Change</u>	<u>% Change</u>
Sioux Falls City	81,343	335,548	391,247	17.3	411,541	453,738	10.3	13.4
Rapid City	46,492	204,461	237,660	16.2	283,052	295,290	4.3	9.3
Aberdeen	25,956	93,576	102,613	9.7	113,303	118,976	5.0	7.1
Watertown	15,649	63,806	70,672	10.8	75,304	78,427	4.1	7.2
Brookings	14,951	41,699	47,955	15.0	51,018	53,358	4.6	9.3
Mitchell	13,916	52,647	55,941	6.3	64,508	66,228	2.7	4.3
Huron	13,000	39,878	41,855	10.0	47,684	48,769	2.3	5.8
Yankton	12,011	43,873	49,630	17.1	52,562	53,504	1.9	7.0
Pierre	11,973	39,772	43,314	8.9	46,717	49,041	5.0	6.8
Vermillion	10,136	17,166	18,959	10.4	20,157	20,198	0.2	4.9
Madison	6,210	18,007	18,232	1.2	20,235	23,978	18.5	10.4
Spearfish	5,251	16,879	18,684	10.7	21,594	24,205	12.1	11.5
Sturgis	5,184	13,413	14,321	6.8	16,534	18,107	9.5	8.3
Hot Springs	4,742	8,529	9,549	12.0	10,891	12,128	11.4	11.6
Belle Fourche	4,692	12,551	13,802	10.0	15,983	16,757	4.8	7.1
Lead	4,330	11,009	11,621	5.6	12,750	11,374	-17.3	-7.1
Moabridge	4,174	12,657	13,272	4.9	14,562	14,523	-0.3	2.1
Milbank	4,120	14,917	16,333	9.5	17,812	16,699	-6.2	0.9
Winnier	3,472	14,696	15,297	4.1	18,219	18,131	-0.5	1.6
Box Elder	3,186	685	871	27.2	898	1,130	25.6	26.4
Redfield	3,027	9,020	9,709	7.6	10,517	11,090	5.4	6.5
Canton	2,886	5,044	5,614	11.3	5,954	6,736	13.1	12.3
Sisseton	2,789	7,598	7,792	2.6	8,447	9,075	7.4	5.1
Brandon	2,589	2,708	3,355	23.9	3,529	3,389	-4.0	8.1
Webster	2,417	8,542	9,037	5.8	10,241	10,089	-1.5	1.8
Dell Rapids	2,389	4,224	4,443	5.2	4,956	5,210	5.1	5.2
Chamberlain	2,258	8,277	9,542	15.3	10,439	10,999	5.4	9.8
Flandreau	2,114	4,715	5,047	7.0	5,374	5,377	0.1	3.3
Deadwood	2,035	8,348	8,496	1.8	9,944	10,438	5.0	3.5
North Sioux City	1,992	1,368	1,177	-14.0	1,581	1,783	12.8	0.4
Miller	1,931	7,618	7,823	2.7	8,639	8,808	2.0	2.3
Lemmon	1,871	6,838	7,041	3.0	8,231	8,017	-2.6	-0.1
Beresford	1,865	5,350	5,721	6.9	6,291	6,059	-3.7	1.2
Custer	1,830	9,141	10,235	12.0	11,444	16,013	19.1	16.2
Lennox	1,827	2,877	3,548	23.3	3,463	3,983	15.0	18.8
Fort Pierre	1,789	5,166	5,385	4.2	6,294	6,574	4.4	4.4
Elk Point	1,661	2,939	3,102	5.5	3,185	3,056	-4.1	0.6
Gettysburg	1,623	5,325	5,127	-3.7	6,416	6,335	-1.3	-2.4
Britton	1,590	4,477	4,727	5.6	5,281	5,716	8.2	7.0
Parkston	1,545	5,086	4,972	-2.2	5,995	5,654	-5.7	-4.1
Gregory	1,503	4,767	5,768	21.0	5,857	6,012	2.6	10.9
Salem	1,486	4,563	4,510	-1.2	4,926	4,908	0.4	0.4
Edgemont	1,468	2,185	2,388	9.3	2,667	2,804	5.1	7.0
Freeman	1,462	6,023	5,864	-2.6	6,592	6,334	-3.9	-3.3
Wagner	1,453	4,478	4,641	3.6	5,288	5,293	0.1	1.7
Springfield	1,377	1,500	1,403	-6.5	1,988	1,417	-28.7	-19.2
Eureka	1,360	3,341	3,405	1.9	3,894	3,876	-0.5	0.6
Clark	1,351	3,643	3,978	9.2	4,750	4,926	3.7	6.1
Platte	1,334	5,888	6,386	8.5	7,241	7,586	4.8	6.4
Clear Lake	1,310	4,820	5,124	6.3	5,311	5,566	4.8	5.5
Tyndall	1,253	2,801	3,124	11.5	3,126	3,117	-0.3	5.3
De Smet	1,237	3,759	4,077	8.5	4,676	4,490	-4.0	1.6
Groton	1,230	2,680	3,160	17.9	3,349	3,398	1.5	8.8
Volga	1,221	1,392	1,435	3.1	1,585	1,375	-13.2	-5.6
Hartford	1,207	998	970	-2.8	1,117	1,310	17.3	7.8
Wessington Springs	1,203	3,214	3,301	2.7	3,607	3,622	0.4	1.5
Howard	1,169	3,050	3,262	7.0	3,923	3,665	-6.6	-0.7
Ipswich	1,153	3,474	3,622	4.3	3,774	4,068	7.8	6.1
Philip	1,088	4,806	5,109	6.3	5,802	5,768	-0.6	2.5
Highmore	1,055	3,594	3,806	5.9	4,121	4,180	1.4	3.5
Lake Andes	1,029	2,285	1,981	-13.3	2,189	2,099	-4.1	-8.8
Scotland	1,022	1,956	2,019	3.2	2,141	2,082	-2.8	0.1
Martin	1,018	4,717	5,149	9.2	5,515	5,436	-1.4	3.5

	<u>Jan.-June</u>	<u>July-Dec.</u>	<u>Jan.-Dec.</u>
	<u>1983-1984</u>	<u>1983-1984</u>	<u>1983-1984</u>
Population	<u>Ave. % Chng.</u>	<u>Ave. % Chng.</u>	<u>Ave. % Chng.</u>
100,000 - 40,000	16.8	7.3	11.4
39,999 - 10,000	10.5	3.2	6.6
9,999 - 3,000	9.1	5.7	7.2
2,999 - 2,000	9.1	3.8	6.1
1,999 - 1,500	5.4	3.9	4.6
1,499 - 1,000	4.2	-0.9	1.4

SOUTH DAKOTA INCOME AND EMPLOYMENT

TOTAL PERSONAL INCOME
United States, Plains Region and States
Fourth Quarter 1983-Fourth Quarter 1984
(Millions of Dollars, Seasonally Adjusted at Annual Rates)

	1983			1984		% Change
	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	4th Qtr. 1983
United States	2,827,017	2,906,532	2,970,393	3,039,943	3,086,435	9.2
Plains States	205,990	215,873	215,329	222,024	224,672	9.1
Iowa	32,648	34,933	34,574	35,303	35,900	10.0
Kansas	30,607	32,001	31,962	32,972	32,955	7.7
Minnesota	51,307	53,731	53,975	55,616	56,714	10.5
Missouri	56,878	58,917	60,103	61,499	62,434	9.8
Nebraska	18,912	19,843	19,112	19,885	20,042	6.0
North Dakota	9,460	8,855	8,062	8,737	8,559	1.2
South Dakota	7,177	7,592	7,522	8,012	8,068	12.4

Note: Detail may not add to totals because of rounding.

Source: U.S. Department of Commerce, Bureau of Economic Analysis

SOUTH DAKOTA NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT March 1984 and March 1985 (In Thousands)

	March 1984	March 1985	% Change	Average Weekly Hours		Average Hourly Earnings	
	1984	1985		March 1984	March 1985	March 1984	March 1985
Total Employment	238.7	240.3	0.7				
Mining	2.5	2.4	-4.0				
Construction	7.0	7.3	4.3				
Manufacturing	27.6	26.7	-3.3	41.9	42.5	\$7.10	\$7.45
Durable Goods	15.0	13.8	-8.0	41.3	41.7	6.84	7.26
Fabricated Metals & Mach.	9.9	8.7	-12.1				
Nondurable Goods	12.7	12.9	1.6	42.4	43.4	7.32	7.65
Food & Kindred Products	7.5	7.8	4.0				
Paper, Printing & Publishing	2.5	2.6	4.0				
Transportation & Pub. Utilities	12.0	12.4	3.3				
Transportation	7.0	7.3	4.3				
Communication & Pub. Utilities	5.0	5.1	2.0				
Wholesale & Retail Trade	62.3	63.0	1.1				
Wholesale Trade	16.4	16.0	-2.4				
Durable Goods	7.2	6.7	-6.9				
Nondurable Goods	9.3	9.3	0.0				
Retail Trade	45.9	47.1	2.6				
Finance, Insurance & Real Estate	12.8	13.4	4.7				
Services	56.2	57.4	2.1				
Hotels, Amuse., Pers. & Business	13.7	14.0	2.2				
Medical & Health	22.4	22.3	-0.4				
Educational, Membership & Social	17.0	17.7	4.1				
Government	58.1	57.7	-0.7				
Federal	10.1	10.3	2.0				
State	16.2	16.2	0.0				
State Education	8.3	8.2	-1.2				
Local	31.7	31.2	-1.6				
Local Education	19.0	18.4	-3.2				

Source: South Dakota Department of Labor, "Labor Bulletin".

SOUTH DAKOTA AGRICULTURAL INDICATORS

PROSPECTIVE PLANTINGS SOUTH DAKOTA - FEBRUARY 1985 (1,000 Acres)

	Acreage Planted ¹		Intentions
	1982	1984	1985
All Corn	2,450	3,400	3,500
All Sorghum	400	560	500
Oats	2,000	1,700	2,000
Barley	580	610	750
Soybeans	1,000	1,400	1,350
Flaxseed	110	105	100
Durum Wheat	80	95	95
Other Spring Wheat	1,450	1,900	2,200
All Sunflowers	450	600	440
All Hay	4,040	4,310	4,310

Source: South Dakota Crop & Livestock Reporter.

PRICES RECEIVED BY FARMERS FOR COMMODITIES SOLD - SOUTH DAKOTA March 1984 and March 1985

Commodity and Unit	Base Period		Mar. 1985		Mar. 1985 Price Above or Below Mar. 1984
	Price		Price as %		
	1910-1914	Average	1984	1985	
Wheat Bu.	85	85	7.66	7.47	408
Corn Bu.	51	51	2.05	2.49	498
Oats Bu.	75	75	1.67	1.92	414
Barley Bu.	59	59	2.45	1.93	527
Flaxseed Bu.	1.68	1.68	6.48	5.86	
Milk, Whsl. Cwt.	1.82	1.82			
Eggs Doz.	1.196	1.196			
Cattle Cwt.	5.24	5.24	62.50	59.50	1152
Calves Cwt.	6.08	6.08	67.50	68.90	1155
Hogs Cwt.	7.07	7.07	45.00	47.90	621
Sheep Cwt.	4.24	4.24	15.00	19.90	469
Lambs Cwt.	5.66	5.66	57.00	69.10	1221
Wool Lb.	1.178	1.178	2.60	2.58	726

¹Season average price only.

Source: South Dakota Crop & Livestock Reporter.

SOUTH DAKOTA LOCAL CONDITIONS INDICATORS

(% Change Like Period Previous Yr.)

City	Taxable Sales ¹			Telephone	Housing	Postal	Employment ³
	Total	Retail	Services	Services ²	Starts ²	Indicator	
Aberdeen	4.6	4.1	4.5	0.4		6.9	-0.1
Belle Fourche	-4.3	-5.1	8.6	-0.9			-0.3
Brookings	0.2	4.9	-9.4			-4.7	-1.2
Canton	2.3	7.4	-6.1	0.2			3.4
Chamberlain	6.4	4.8	1.8	1.2	-5.5		0.8
Deadwood	-9.0	-2.4	-24.9	-0.9			0.7
DeSmet	1.5	0.7	17.4	0.6			3.5
Elk Point	-13.6	-11.3	-33.0	-2.4			-7.2
Hot Springs	8.1	10.0	6.2				-5.7
Huron	-2.1	-0.3	-2.6	-0.6	-21.2	4.1	1.1
Lead	-15.4	7.3	-15.6	0.5			0.7
Madison	17.4	4.3	5.7	-7.1			6.0
Milbank	-4.2	-7.6	6.6	0.8			-1.1
Mitchell	3.6	1.9	15.5	-0.4	-58.2	2.4	0.4
Mobridge	2.7	2.0	10.7				0.4
Pierre	3.2	2.5	4.5	2.4	-68.3	3.7	2.6
Rapid City	6.3	4.0	2.9	1.8	-47.1	40.6	5.3
Sioux Falls	6.9	8.6	7.7	2.9	83.8	15.1	2.3
Spearfish	5.3	5.4	7.4		-26.6		-0.7
Sturgis	5.9	10.8	1.5	0.5			3.9
Vermillion	-2.9	-4.1	1.7	4.0			-3.6
Watertown	3.5	0.7	5.3	2.1	-65.5	-6.0	7.9
Winner	2.5	-0.2	5.5	0.3			0.9
Yankton	-0.9	0.2	-2.1	-0.5		-15.9	5.4

¹Based on County Data.

²Percentage change for January-February 1984 and 1985.

³Percentage change for January-March 1984 and 1985. Data reported for housing represents the value of housing starts. Included in postal indicators are: postage stock sales, postage meters for customers, permit imprint postage (3rd class regular), and second class postage.

⁴Percentage change for March 1984 and 1985. Telephone data are for the number of access lines in service.

Address Correction Requested

SOUTH DAKOTA Business Review

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CONSUMER PRICE INDEX

United States
Jan. - Mar. 1985
(1967=100)

Item	Jan.	Feb.	March	Unadj. % Change
				Jan. Mar.
All Items	316.1	317.4	318.8	0.9
Food & beverages	299.3	301.4	301.6	0.8
Food	307.3	309.5	309.7	0.8
Alcoholic beverages	224.3	225.8	226.5	1.0
Housing	342.0	343.6	344.7	0.8
Shelter	371.2	373.3	374.3	0.8
Renters' Costs	111.8	112.4	112.9	1.0
Homeowners' Costs	110.0	110.7	110.6	0.7
Fuel & Other Utilities	387.2	386.5	388.2	0.3
Fuel	481.2	480.8	482.2	0.2
Fuel oil, coal & bldg. gas	621.6	623.4	620.8	-0.1
Gas (piped) & electricity	444.1	443.3	445.5	0.3
Other util. & Pub. Services	235.3	234.3	236.3	0.4
Household furnishing	244.2	246.2	246.9	1.0
Apparel & upkeep	199.8	201.8	205.3	2.8
Transportation	314.7	314.3	316.7	0.6
Private transportation	309.1	308.7	311.0	0.6
Public transportation	394.5	394.4	397.3	0.7
Medical care	391.1	393.8	396.5	1.4
Entertainment	261.0	261.3	262.2	0.5
Other goods and services	319.1	320.5	321.1	0.6

*Consumer Price Index for all Urban Consumers

Source: Bureau of Labor Statistics, U.S. Dept. of Labor